

**PROFESSIONAL DEVELOPMENT FOR CULTURALLY AND
LINGUISTICALLY RESPONSIVE CLASSROOMS: AN ACTION
RESEARCH STUDY**

By
Violet Jiménez Sims
BA, University of Connecticut, 2002
MA, University of Connecticut, 2005
CAGS, University of Connecticut, 2011

Chair

Dr. Thomas Christ, University of Bridgeport

Reader

Dr. Lori Noto, University of Bridgeport

Reader

Dr. Aram Ayalon, Central Connecticut State University

DISSERTATION

SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS

FOR THE DEGREE OF DOCTOR OF EDUCATION IN

THE SCHOOL OF EDUCATION

UNIVERSITY OF BRIDGEPORT

BRIDGEPORT, CONNECTICUT

June 2018

University of Bridgeport
Committee Approval of a Dissertation

Dissertation Title:

Professional Development for Culturally and Linguistically Responsive Classrooms: An Action Research Study

Submitted by: Violet Jiménez Sims

I have read this dissertation and have found it to be of satisfactory quality for a doctoral degree.

06/26/18
06/26/2018

Thomas W. Christ
Thomas W. Christ, Ph.D.
Chair, Dissertation Committee

I have read this dissertation and have found it to be of satisfactory quality for a doctoral degree.

06/26/2018
06/26/2018

Lori Noto
Lori Noto, Ph.D.
Member, Dissertation Committee

I have read this dissertation and have found it to be of satisfactory quality for a doctoral degree.

9-11-18
09/11/2018

Aram Ayalon
Aram Ayalon, Ph.D.
Member, Dissertation Committee

I have read this dissertation and have found it to be of satisfactory quality for a doctoral degree.

06/26/18
06/26/2018

Thomas W. Christ
Thomas W. Christ, Ph.D.
Director Educational Leadership Doctoral Program

I have read this dissertation and have found it to be of satisfactory quality for a doctoral degree.

9/10/18
06/26/2018 - ACT

Allen Cook
Allen Cook, Ph.D.
Dean of the School of Education
Dr. Allen Cook

© Copyright by Violet Jiménez Sims 2018

Abstract

This action research study evaluated and sought to improve teacher professional development (PD) strategies designed to instill culturally and linguistically responsive pedagogies in classrooms at an elementary school. The study assessed participants' practical application and perceptions of the applicability of English learner instruction strategies and culturally responsive pedagogy in mainstream classrooms. The first phase of the study included piloting the survey instrument with participants who attended a conference on bilingual education, and conducting a thorough literature review. The action research study was then designed so that 29 teachers in a public elementary school received professional development (PD). Nine of the teachers that participated in the PD met the sampling criteria and were willing to participate in the study - four in the first iteration and five in the second. Observations, pre- and post-PD surveys, and participant interviews provided insight into the teachers' PD needs, the impact of the intervention, and provided feedback on the opportunities and challenges throughout the teachers' learning experience. Teacher-participants were observed prior to their participation in the PD intervention using a protocol with observable components of sheltered instruction and culturally responsive teaching. A two sample t-test for means determined that three observable elements were statistically significant on the post-intervention observations: language objectives clearly defined, displayed, and reviewed with students; concepts explicitly linked to students' background experiences; and instruction is scaffolded to promote culturally and linguistically diverse (CLD) student learning.

In the first iteration, 15 themes emerged from the interviews during which the four participants discussed the content received in the PD and how they would apply it in their classrooms.

Second iteration interviews further supported that participants felt the professional development

and strategies were applicable to their practice. Surveys administered before and after each iteration supported that the PD helped participants become more comfortable with teaching culturally and linguistically diverse students after receiving professional development (PD) on the topic. The researcher was also a participant and facilitator relying on deep reflection to improve the PD modules. The results from iterations one and two were carefully analyzed to complete the third iteration – a practical guide to planning professional development for creating culturally and linguistically responsive classrooms. Although strategies should be adapted to meet the needs of each school’s population, academic offerings, and themes (as in the case of magnet schools), the professional development guide resulting from this research can help administrators and faculty collect baseline data, plan and deliver PD, prioritize and implement strategies, and collect post-PD data to determine if the PD has impacted instruction.

Keywords: professional development, ELL, culturally responsive, sheltered instruction.

To my family

D'Andre, Andrea, Deana, and Mom

La direfencia entro lo posible y lo imposible está en la determinacion de la persona.

The difference between the possible and the impossible lies in a person's determination.

ACKNOWLEDGEMENTS

While I survived many sleepless nights, lessons in the importance of backing up data, research plans that fell through because “life happens”, dense methods courses, journal article reviews and assignments that aimed to meet Dr. Christ’s stringent standards, and tears of frustration in between, I would not be at the finish line without an incredible support system. I tested my husband D’Andre’s patience many times, and he passed! Thank you for sharing your statistics expertise and for doing your share (and my share) of chores. My daughters, both wise beyond their years, are my strength and motivation. I love you both “more than you love me”. My mother, thank you for your unconditional love, helping with the kids, the cat, and anything that your children need without complaints and never sending us off without a *bendición*.

As if my amazing family was not enough, I have an incredible bunch of people in my life that are more like kin than friends. Thank you all who have been supportive of this and all my endeavors, who have understood the times I couldn’t be there, and who made time for me when I needed to socialize to stay sane. Dawn Brooks, my colleague, mi amiga, we became friends in this doctoral program and a few years feel like a lifetime. Words can’t express how grateful I am for your selflessness, and for you taking time from your own research and busy schedule to be my co-investigator by conducting interviews for this study.

I also have to express my gratitude to my dissertation committee: Dr. Christ, Dr. Noto, and Dr. Ayalon. Thank you your willingness to work with me, your guidance, and challenging me as early as the proposal phase. Sometimes I hear Dr. Christ reminding me not to let “the dog wag the tail”, and then I wake up. Point taken and applied. Of course, I also would not have

accomplished this research without the participants who volunteered their time to fill out surveys, participate in interviews, and continue to have conversations with me about the exciting ways in which they are ensuring that their classrooms are culturally responsive. Mil gracias to everyone that has helped me make this dream come true. *¡Sí se puede!*

Table of Contents

Abstract.....	ii
List of Tables.....	ix
List of Figures.....	xi
Chapter I: Introduction.....	1
Problem Statement.....	4
Purpose/Significance.....	5
Limitations of the Study.....	7
Research Questions.....	8
Terminology.....	9
Chapter II: Literature Review.....	11
The Impact of Teacher Preparation.....	12
Alignment of Home and School Cultures.....	14
Professional Development is Necessary.....	15
Culturally Responsive Pedagogy.....	16
Applicable Methodologies for Studies on Professional Development Training.....	18
Effective Presentations and Professional Development	19
Relevant Theory.....	21
Language Acquisition.....	21
Systemic Functional Linguistics.....	22
Framework for Culturally and Linguistically Responsive Teaching.....	23
Chapter III: Methods.....	28
Intervention.....	28
Procedures.....	36
Research Questions.....	36
Role of the Researcher.....	37
Bounding the Case.....	38
Data Collection	39
Data Analysis.....	44
Sampling.....	48
Credibility/Validity.....	49
Chapter IV: Results.....	54
Pilot Study Results/Trends.....	54
Research Study Results.....	63
First Iteration Surveys.....	64
First Iteration Interviews.....	74
First Iteration Pre- and Post-Intervention Observations.....	84
Second Iteration Surveys.....	86
Second Iteration Interviews.....	93
Iteration 1 and 2 Observations –Aggregate Results by Element.....	99
Third Iteration Secondary Data.....	102
Summary.....	105
Chapter V: Conclusions.....	109
Summary.....	109
Conclusions.....	114
Limitations.....	121

Researcher Praxis.....	122
Practical Implications.....	129
Future Research.....	131
References.....	133
Appendix A: Pre- and Post-PD Survey.....	140
Appendix B: Observation protocol.....	142
Appendix C: Semi-structured Interview.....	144
Appendix D: Pre Conference and Post Conference Survey.....	145
Appendix E: Interviewer Confidentiality Agreement.....	147
Appendix F: First Iteration Observation Feedback for Participants.....	148
Appendix G: Second Iteration Observation Feedback for Participants.....	150
Appendix H: Table 6 Pre-PD Open-ended Responses.....	152
Appendix I: Table 11 Pre-Intervention Observation 1 Scores.....	154
Appendix J: Table 12 Post-Intervention Observation 1 Scores.....	155
Appendix K: Table 13 Initial Themes.....	156
Appendix L: Table 16 Examples of Themes.....	158
Appendix M: Table 20 Initial Themes 2.....	164
Appendix N: Table 21 Examples of Themes 2.....	165
Appendix O: Culturally and Linguistically Responsive Classroom PD Plan.....	170
Appendix P: “Look Fors” for Culturally and Linguistically Responsive Classrooms.....	194

List of Tables

Table 1.	CT State Mastery Test Results	5
Table 2.	Pre-Conference Survey Open-ended Themes	59
Table 3.	Pre-Conference Perspective Results	60
Table 4.	Post Conference Themes	62
Table 5.	Closed-ended Post Conference Participant Perceptions	62
Table 6.	Pre-PD Open-ended Responses	152
Table 7.	Pre-PD Closed-ended Responses	66
Table 8.	Post-PD Open-ended Responses	69
Table 9	Post-PD Closed-ended Responses	71
Table 10.	Pre vs. Post PD 1 Changes in Perception	73
Table 11.	Pre-Intervention Observation 1 Scores	154
Table 12.	Post-Intervention Observation 1 Scores	155
Table 13.	Initial Themes	156
Table 14.	Definition of Categories	76
Table 15.	Categories and Themes	77
Table 16.	Examples of Themes	158
Table 17.	Pre-PD 2 Open-ended Responses	88
Table 18.	Pre-PD 2 Closed-ended Responses	89
Table 19.	Pre vs. Post PD 2 Changes in Perception	93
Table 20.	Initial Themes 2	164
Table 21.	Examples of Themes 2	165
Table 22.	Definition of Categories 2	94

Table 23.	Categories and Themes 2	95
Table 24.	Pre and Post-Intervention Results by Protocol Element	102
Table 25.	Good and Bad PD Traits	104

List of Figures

Figure 1.	ELL Distribution by Grade Level	3
Figure 2.	Study Design	41
Figure 3.	Concept Map	53

Chapter I: Introduction

The United States population of students classified as English Language Learners (ELLs) is growing exponentially (Ballantyne, Sanderman, & Levy, 2008; Denham & Lobeck, 2005; Cartledge & Kourea, 2008; U.S. Department of Education, 2017). The National Center for Education Statistics estimates that the number of students identified as ELLs in U.S. public schools has increased from 4.3 million in 2004-2005 to 4.6 million in 2014-2015 (U.S. Department of Education, 2017). Ballantyne, Sanderman, and Levy (2008) noted that over five million ELLs are enrolled in U.S. schools, an increase of over 57% in the decade prior to the study. Between the years 1989 and 2002, “the national growth rate for K-12 English language learners enrolled in public schools was 105%” (Denham & Lobeck, 2005, p.17) and increased 51% between the 1997 and 1998 school year and the 2007 and 2008 school year (Ross, 2014). The implications for public education are vast. If, in addition to national and state standards for each academic subject, students are simultaneously acquiring a new language, instruction must be aligned with the linguistic need inferred by the population shift.

Baker (2006) and Schecter and Cummings (2003) have concluded that academic language proficiency in a second or other language generally takes between five and seven years. Krashen and Terrell (1983) compiled decades of research indicating that language can be acquired naturally, via context, as detailed in Krashen’s theory of language acquisition. Krashen and Terrell (1983) compiled decades of research indicating that language can be acquired naturally, via context, as detailed in Krashen’s theory of language acquisition. Krashen’s theory of second language acquisition consists of five main hypotheses: the acquisition-learning hypothesis, the monitor hypothesis, the natural order hypothesis, the input hypothesis, and the affective filter hypothesis. The most fundamental of Krashen’s hypotheses is the acquisition-

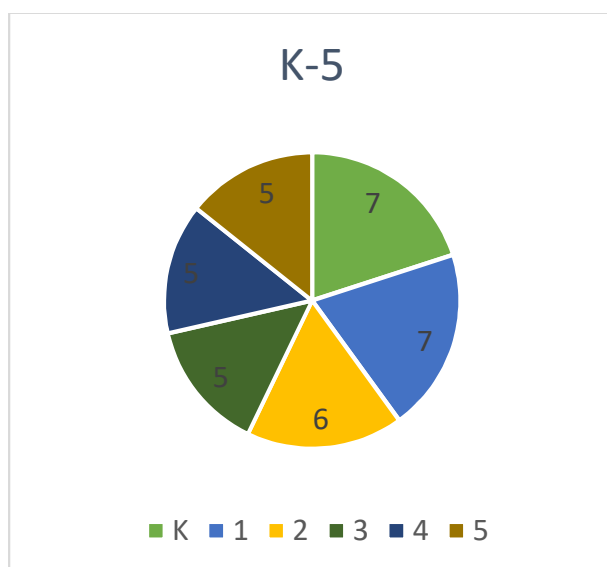
learning hypothesis, which purports that language is acquired subconsciously through meaningful interactions in the target language that focus on meaning rather than form. To support the academic needs of ELLs, districts must take the initiative to implement research-based programs that meet the needs of their specific populations. Members of non-dominant racial, ethnic, and social groups may also be marginalized by traditional mainstream curricula and classroom environments (Savage, Hindle, Meyer, Hynds, Penetito & Sleeter, 2011; Cartledge & Kourea, 2008).

Ruiz (2011) and Vogt and Rogalla (2009) indicate it is not sufficient to only use effective instructional strategies, it is also necessary to adapt those strategies to specific students and co-construct classroom instruction with them – taking into account students’ background and prior knowledge and integrating them into lessons. Diverse populations are even more likely to have teachers who do not possess the knowledge and training to meet their individual needs (Ball, Thames & Phelps, 2008). The work of Ballantyne, Sanderman, and Levy (2008) can help bridge what we know about language acquisition, the rapid growth of diverse populations, and the need for training mainstream teachers to meet the needs of this population. Ballantyne et al.’s research goes beyond identifying the problems by presenting concrete solutions that address the shortfalls of state- and district-wide staff development for practitioners, such as a lack of curricular and instructional strategies to specifically address the needs of ELLs.

The school used for this study had a culturally and linguistically diverse (CLD) population in grades Pre K-6 whose racial/ethnic make-up was 70% non-white students, 53% Hispanic/Latino students, and 13.4% of the K-6 student population was labeled English language learners (ELL). The ELLs were evenly distributed among the classrooms and grades in which they received services, which were offered in grades K-5. At the time of the study there were

seven ELLs in grade K, seven ELLs in grade 1, six ELLs in grade 2, five ELLs in grade 3, five ELLs in grade 4, and five ELLs in grade 5 (see figure 1). Therefore, it was essential to ensure that the mainstream teachers and staff at the school have the knowledge and resources to address the needs of the CLD students that they, inevitably, teach every day. To that end, the researcher used elements of the Sheltered Instruction Observation Protocol (SIOP) method combined with culturally responsive classroom recommendations, aligned with theories of comprehensible input and systemic functional linguistics to design a professional development (PD) intervention that was refined after each of two iterations (Dellicarpini & Alonso, 2013; Echevarría, Vogt, & Short, 2010; Schleppegrell & O'Hallaron, 2011). Prior to the action research study, the researcher piloted the survey instrument with participants at a bilingual education conference. While the pilot survey sought to obtain preliminary data that could inform the PD intervention content (see Appendix E), it also was administered to determine if (a) the instructions were comprehensible, (b) if the wording of the survey was appropriate, and (c) if the survey measured what it intended to measure.

Figure 1 ELL Distribution by Grade Level



Problem Statement

Connecticut's bilingual statute (Connecticut General Statutes, sections 10-17e-j) does not require that bilingual programming be offered unless there are 20 students speaking the same home language in a single school, and such programming is limited to 30 months per student with few exceptions. This creates a challenge for schools with diverse populations of ELLs. Emerging bilinguals often do not receive comprehensive bilingual services and are placed in mainstream classes before reaching grade-level academic language proficiency.

Mainstream teachers may not be aware that ELLs ineligible for bilingual education may display functional use of the language while struggling with academic language proficiency. Teachers may also be unaware of strategies that support language development in the classroom that will not interrupt lesson content delivery (Dellicarpini & Alonso, 2013). Savage, Hindle, Meyer, Hynds, Penetito, and Sleeter (2011) indicated, "Schools that reflect a dominant culture represent invisible cultures that can effectively privilege students who share that dominant cultural identity while simultaneously disadvantaging students whose cultures are different" (p. 184). These issues pose a problem for students attempting to access the curriculum, and teachers' ability to make content comprehensible. Schools and teachers should be taking steps to provide culturally responsive environments and academic content. Connecticut ELLs in grades K-8 are not meeting growth targets on the Smarter Balance assessment used as the state-wide mastery examination; therefore, districts across the state need to address the shortfalls of educating ELLs. Regardless of whether ELL students participated in districts' various versions of bilingual programs or did not, results were similarly low for the entire population when comparing school year 2014-15 to 2015-16. For example, only about 30 percent of 4-8 grade ELLs met growth targets in English language arts (see table 1).

Table 1 CT State Mastery Test Results

Grade in Year 2 (2015-16)	ELA			Math			
	EL Service	Number of Matched ELs	Percentage of ELs That Met Growth Target	Average Percentage of Target Achieved by ELs	Number of Matched ELs	Percentage of ELs That Met Growth Target	Average Percentage of Target Achieved by ELs
4	Bilingual	319	31.7%	63.8%	445	30.1%	62.8%
5	Bilingual	298	36.6%	65.1%	416	39.2%	60.8%
6	Bilingual	184	26.6%	51.3%	312	22.4%	38.8%
7	Bilingual	239	37.7%	58.4%	323	44.3%	62.6%
8	Bilingual	232	31.0%	55.1%	368	39.9%	55.3%
Total	Bilingual	1272	33.1%	59.7%	1864	35.2%	56.8%
4	ESL or No Services	1394	31.6%	60.1%	1451	36.0%	68.2%
5	ESL or No Services	1287	35.0%	64.4%	1321	37.6%	59.2%
6	ESL or No Services	960	28.4%	52.7%	1006	30.1%	46.4%
7	ESL or No Services	927	26.8%	50.7%	956	38.3%	55.2%
8	ESL or No Services	743	29.7%	51.9%	781	38.2%	55.2%
Total	ESL or No Services	5311	30.7%	57.0%	5515	36.0%	58.0%
4	CT Total	1713	31.6%	60.8%	1896	34.7%	66.9%
5	CT Total	1585	35.3%	64.6%	1737	38.0%	59.6%
6	CT Total	1144	28.1%	52.4%	1318	28.3%	44.6%
7	CT Total	1166	29.0%	52.2%	1279	39.8%	57.1%
8	CT Total	975	30.1%	52.6%	1149	38.7%	55.2%
Total	CT Total	6583	31.2%	57.5%	7379	35.8%	57.7%

Results in table 1 show that regardless of whether ELL students participated in districts' various versions of bilingual programs or did not, results were similarly low for the entire population when comparing school year 2014-15 to 2015-16. (February 2017 report: Academic Growth of Bilingual Students on the Statewide Mastery Examination)

Purpose/Significance

The purpose of this study was for the researcher to refine the content of professional development (PD) that contained research-based ELL instruction strategies and guidelines for culturally responsive classrooms. The researcher sought to help teacher-participants become more aware of and implement empirically-based strategies and guidelines in their classrooms. The researcher also investigated if participants' perceptions of the applicability of using the

strategies changed with in-service training. Ultimately, the researcher's goal was to improve her own process of designing PD, and to improve local conditions. Specifically, the intent of this action research study was to help teacher-participants make instruction content comprehensible for ELLs and CLD students through the use of culturally responsive classrooms and sheltered instruction teaching strategies.

Grade level proficiency requires mastery of cognitive academic language, which can take English language learners (ELLs) five to seven years or more to attain (Baker, 2006; Schechter & Cummings, 2003). However, according to Baker (2006), basic interpersonal communication skills emerge as early as in a newcomer's first six months. These skills can be observed on a school playground, in the cafeteria, or in any other social setting where students communicate with peers. Cognitive academic language proficiency is necessary for analyzing, interpreting, writing, and making sense of academic language; and for students to be successful on high-stakes tests. Zwiers (2005) explains that, "For English language learners, academic English is like a third language, their second language being the social language of the hallways, community, and media" (p. 60). Therefore, basic interpersonal communication skills and cognitive academic language proficiency are entirely different, and teachers must be aware of the difference and their implications on classroom learning.

There are empirically-based strategies that support students whose vernacular is not academic English in the mainstream classroom (Dellicarpini & Alonso, 2013; Echevarría, Vogt, & Short, 2010; Schleppegrell & O'Hallaron, 2011). Additionally, strategies that benefit ELLs in the classroom have been beneficial for mainstream and unidentified ELL student outcomes (Dellicarpini & Alonso, 2013; Echevarría, Vogt, and Short, 2010). Echevarría, Vogt, and Short (2010) compiled lesson models and observational checklists known as the Sheltered Instructional

Observational Protocol (SIOP), applicable in any content area. Cartledge and Kourea (2008) identified important elements for a culturally responsive classroom and Lucas and Villegas (2010) provided a framework for culturally responsive teaching. In addition, Schleppegrell and O'Hallaron (2011) make concrete recommendations for mainstream teachers, based on the theory of Systemic Functional Linguistics. These research-based resources are further discussed in the theory section, and together make creating PD to support teachers and measuring the implementation of learned strategies possible.

Limitations of the Study

This study was an action research study bound by time constraints, access to limited planned professional development days, one location, and a limited number of participants. The study was limited to one urban elementary school in one magnet school system that has school buildings in both urban and suburban environments with nine teachers participating. The certified teaching staff and potential participant pool at the study site was small, consisting of fourteen classroom teachers, five special education teachers, five interventionists, and five specials/enrichment class teachers. The participant pool was further narrowed by medical, maternity, and other leaves that impacted some potential participants' ability to be present during observations, during the intervention itself, or for the interview process. Any participants that were unable or unwilling to complete any of the study components, were eliminated and are not featured as study participants.

Despite limitations, the process used in this study to assess participants' needs and create customized professional development (PD) is likely to be applicable in other sites that are interested in creating customized PD. However, it is important to note that the results of this research were limited to the perspectives and observations of teachers participating in this study.

The results are not representative of other teachers in the school nor district. The knowledge gained from this study supports the constructivist perspective of the researcher that guides the planning of personalized PD for culturally and linguistically responsive classrooms and is expected to be applicable for other PD topics and in other settings.

Research Questions

The research questions were aligned to the problem statement that if school only address the needs of the dominant culture, they disadvantage students whose cultures are different; and teachers may be unaware of strategies that support language development in the classroom using lesson content while providing culturally responsive environments that help all students access the curriculum. The overarching question, quantitative hypothesis, and qualitative questions addressed the purpose of the study: for the researcher to refine the content of professional development (PD) that contains research-based ELL instruction strategies and guidelines for culturally responsive classrooms and to help teacher-participants become more aware of and implement those strategies and guidelines in their classrooms.

Overarching Question:

1. Did professional development for mainstream teachers of culturally and linguistically diverse students have an impact on teachers' (a) Lesson Preparation, (b) Building Background, (c) Comprehensible Input, (d) Interaction, and (e) Practice of Elements for culturally responsive classrooms?

Quantitative Hypothesis:

2. Professional development training for teachers improves their ability to implement sheltered instruction strategies and empirically-based elements of culturally responsive classrooms that are beneficial to culturally and linguistically diverse students.

Qualitative Research Questions:

3. What do teacher participants think about the applicability of professional development with strategies to support culturally and linguistically diverse students?
4. What is the teacher participants' comfort level with teaching culturally and linguistically diverse students after receiving professional development (PD) on the topic?

Terminology

Academic language proficiency is the level at which students demonstrate mastery of the language necessary to succeed in school. This language goes beyond the conversational and is essential to comprehending textbooks, performing well on high-stakes assessments, and mastering academic standards across disciplines.

The term *English Language Learners* (ELLs) throughout this paper refers to students who are not yet proficient in English and who require instructional support in order to fully access academic content in their classes (Ballantyne, Sanderman, and Levy, 2008). Proficiency is determined by the English language proficiency (ELP) assessments used in the state of Connecticut, which are known as the LAS Links.

Culturally and linguistically diverse students (CLD) is an inclusive term for students that are not members of the dominant culture. This includes English language learners from all backgrounds, African American, Hispanic, and Native American students (Savage et al., 2011).

Culturally responsive teaching uses cultural knowledge, prior experiences, frames of reference, and performance styles of ethnically diverse students to make learning encounters more relevant and effective for them.

The term *emerging bilingual* is used to refer to students who are in the process of learning English in addition to their native language. Although it is sometimes interchanged with ELL, “emergent bilingual” implies that students’ are maintaining their native language.

Mainstream teachers are teachers who do not specialize in teaching students who are not yet fully proficient in English, and from whom many ELLs receive all or most of their instruction (Ballantyne et al., 2008). These teachers will be referred to interchangeably as mainstream, content area, or general education teachers.

Sheltered instruction is an approach used to deliver language-rich content area instruction to ELLs in mainstream classrooms. It integrates language and content so that language is acquired rather than explicitly learned. The underlying theory is Krashen’s theory of comprehensible input.

Chapter II Literature Review

Hispanics or Latinos are the fastest growing segment of the U.S. population (Alanis & Rodriguez, 2008; Kandel, 2009; Mendez, Crais, Castro & Kainz, 2015; Cortina, Makar & Mount-Kors, 2015; Ruiz, 2011). Connecticut statistics parallel national trends. According to Data USA, in Connecticut 746,191 people are speakers of a non-English language. In 2015, the most common non-English language spoken in Connecticut was Spanish - 10.8% of the overall population of Connecticut are native Spanish speakers – the next most common native language was Portuguese at 1.01%, followed by Polish at 1% (datausa.io). While all ELLs are entitled to services under the law, it is important to be aware of and prepared for high-incidence language populations that warrant districts to offer comprehensive bilingual programs.

The rapid population growth coupled with current laws, places bilingual students in mainstream classrooms before they have attained cognitive academic language proficiency (CALP). The practice of educating ELLs in bilingual settings by teachers certified to teach English learners for the majority of their compulsory schooling began to change as the growing ELL enrollment outpaced the capacity of bilingual and ESL programs, as political backlash ensued against bilingual education in some states in the late 1990s (e.g., California Proposition 227, Arizona Proposition 203, Massachusetts Question 2), and after the adoption of the No Child Left Behind Act of 2001, which mandated that ELLs be included in states' testing programs and their scores reported as a subgroup (Villegas, Saiz de La Mora, Martin & Mills, 2018). De Jong, Naranjo, and Ouzia (2018) noted that state mandates influenced a universal approach, rather than a transformative approach that could meet students' individual needs.

In addition to historically receiving little to no preparation for teaching ELLs, mainstream teachers may not even be aware that they are educating ELLs – some of who may

not be labeled ELL depending on the process used by districts to identify them – still in the process of acquiring academic language (Villegas, Saiz de La Mora, Martin & Mills, 2018; Dellicarpini & Alonso, 2013). However, when knowledge and skills relating to the instruction of ELLs are infused into subject matter through professional development activities, all teachers, not just those who hold a bilingual/ESL credential, learn about how best to meet the academic and linguistic needs of language learners. This view concedes the reality that a dearth of adequately prepared and credentialed bilingual/ESL teachers exists and that all teachers should receive training for work with ELLs (Kandel, 2009). Ballantyne et al. (2008) point out that,

ELLs may receive instruction in a variety of settings, including bilingual or structured English immersion programs, but an increasing number can be found in mainstream classrooms. The proportion of teachers who are charged with the task of providing high quality instruction to these students has also grown substantially. (p. 9)

Further, Ruiz (2001) states, “As educators we must acknowledge our responsibility of providing an equitable education to ELLs who are included in our mainstream classrooms” (p. 3).

Hadjioannou, Hutchinson, and Hockman (2016) echo that, “Given this current state of affairs, there needs to be a restructuring of teacher professional development so that the cycle of unpreparedness for working with ELLs can be broken” (p. 2).

The Impact of Teacher Preparation

Unfortunately, it seems that the least well prepared teachers are most likely to teach the least advantaged children and diverse populations (Ball, Thames & Phelps, 2008). It is not sufficient to use effective instructional strategies, it is also necessary to adapt those strategies to specific students and co-construct classroom instruction with the learners (Vogt & Rogalla,

2009; Ruiz, 2011) and to create opportunities that enable teachers to learn about ELLs through contact with them (Villegas et al., 2018). Diverse populations are even more likely to have teachers that do not possess the knowledge and training to meet their individual needs (Ball et al., 2008). Professional development and follow-up support is an effective way of building capacity in teachers (Vogt & Rogalla, 2009). Kandel (2009) states,

Professional development programs that purport to address the academic needs of all students must reflect the diversity found in classrooms and attend to multiple factors including the curriculum, classroom instruction and students' language and culture... by offering teachers learning experiences that are classroom-based, long-term, and provide specific information on how to teach the content to students of varying backgrounds. (p. 98)

Vogt and Rogalla (2009) conceptualized four specific aspects of teacher competency that are directly related to students' learning outcomes. The four aspects were subject knowledge, diagnosis, teaching methods, and classroom management. Vogt and Rogalla (2009) focused on addressing the teaching methods aspect, which directly impacted student outcomes. Teaching methods are crucial to student learning; therefore, it is alarming that few educators in the United States receive preservice preparation to teach ELLs prior to entering the classroom and they must learn these essential skills on the job (Batt, 2010). Predominant themes for modifications made after PD and coaching in a study by Batt (2010) were: consistent posting of content and language objectives; more pictures and visuals; more partner and group work; raised expectations for ELLs; more applicable instruction for all students; and more connections with students' home environments. Professional development regarding the instruction of ELLs in the mainstream

classroom needs to become a priority (Ruiz, 2011). Teachers are serving an increasingly diverse student population. However, training in traditional teacher programs does not necessarily equip teachers nor builds their capacity to meet the needs of culturally and linguistically diverse (CLD) students (Batt, 2010; Teemant, 2011; de Jong et al., 2018). In service training is a promising way of improving teacher efficacy in the use of strategies, such as sheltered instruction (Batt, 2010).

Alignment of Home and School Cultures

Relationships with the community and families are a vital component of effective wrap-around services that support social and academic success (Kugman, Lee, & Nelson, 2012; Ferrara, 2009; Huntsinger & Jose, 2009; Henderson & Mapp, 2002; Levine, 1999; Chen & Gregory, 2011; Fan, Williams & Wolters, 2012; and Wang & Sheikh-Khalil, 2014). Kugman et al. state that, “School policy should focus on building and maintaining strong co-ethnic networks among parents and children to create meaningful opportunities to engage with the formal education system” (2012, p.1335). Yet, many factors (i.e.: poverty rates, language barriers, and unwelcoming environments) can have a negative impact on parental involvement in school and district sponsored programs and events (Henderson & Mapp, 2002; Huntsinger & Jose, 2009; Ferrara, 2009). Kugman et al. (2012) found that US-born and immigrant Hispanic parents are less likely to be involved in formal school activities than US parents overall, and immigrant parents perceived more barriers to their involvement.

Bourdieu’s theory of cultural capital and social reproduction, as cited in Kim (2009) states that children’s academic success and parental involvement in the school depend on the comparability of the home and school cultures. According to Kim (2009), the expectations of schools regarding parental involvement are more aligned with middle-class White parents than

minority lower and middle class. Incorporating more of CLD students' home culture into the classroom is a way to align the home and school cultures in a way that supports student success. Hadjioannou et al. (2018) also emphasize that a solid understanding of culture and cultural groups is pivotal in building effective learning environments.

Professional Development is Necessary

A 2008 report by the National Clearinghouse for English Language Acquisition states that, "Given the current demographic shifts in the U.S. population, it is likely that all teachers at some point in their careers will encounter students who do not yet have sufficient proficiency in English to fully access academic content in traditional classrooms. Many teachers do not have preparation to provide high-quality instruction to this population of students" (Ballantyne, Sanderman & Levy, 2008, p.1). The report focuses on ongoing professional development (PD) as the vehicle via which we can build capacity in all teachers who will inevitably have to teach English language learners (ELLs) in their mainstream classrooms. One of the key points of the authors' vision is that staff development be continuous; ongoing; and tailored to novice teachers, experienced teachers, and experts (Ballantyne et al., 2008). For a researcher-practitioner seeking to implement PD of this nature, it is important to understand the elements necessary to produce enough background knowledge and strategies for practical application in mainstream classrooms.

Teacher preparation is essential to the success of all students; therefore, teachers of all disciplines should receive training in methods that make content comprehensible for ELLs (Batt, 2010; Teemant, 2011; Ruiz, 2011). Cartledge and Kourea (2008) also note that, "Creating culturally responsive classrooms that include developing culturally competent teachers is a transformative process of the American educational system" (pp. 366-367). Teaching ELLs in mainstream classrooms is a challenge further intensified when students have or are at risk for

disabilities. Teachers need specialized training in order to meet the needs of diverse populations, and research shows such training has been lacking, “The poor performance of many CLD (culturally and linguistically diverse) students is at least partly a function of being in classrooms with inexperienced and unskilled teachers” (Cartledge & Kourea, 2008, p. 363).

It is important for classroom practice to differentiate between what the research says, and what politicians dictate based on their opinions of immigrants. For instance, proposition 227 banned bilingual education in California despite the research showing that this is the best methodology, as students take five to seven years to achieve cognitive academic language proficiency (Baker, 2006). In addition, Rolstad et al. (2005) note, “Because the education of students who are immigrants is closely tied to issues of nationalism, immigration, and the politics of multilingualism, the debate over how best to serve ELL students has often been clouded by politics” (p. 573). Villegas et al. (2018) recap political backlash against bilingual education such as California’s Proposition 227, Arizona’s Proposition 203, and Massachusetts’s Question 2 that virtually eliminated bilingual education in those states. With overwhelming evidence that teachers who tend to work with ELLs are underprepared and may need to weed through a barrage of conflicting information to figure out what is best for their students, it is imperative to provide ongoing professional development and support to help teachers meet the needs of CLD students.

Culturally Responsive Pedagogy

Savage et al. (2011) note that a lack of connection between the culture of the school and student has been associated with low engagement in the absence of culturally responsive practices. In addition, studies support that low expectations and student alienation can manifest into high suspension/discipline rates, over-representation in special education, and low

educational attainment for minority group students compared to those of the dominant culture (Savage et al., 2011; Cartledge & Kourea, 2008). Often, however, school districts attempt to address these issues with deficit ideologies and programs that attempt to define the problem in students and families (Savage et al., 2011; Cartledge & Kourea, 2008). Cartledge and Kourea (2008) assert that, “Challenges facing educators in meeting the needs of CLD (culturally and linguistically diverse) students include but are not limited to developing cultural awareness, identifying pedagogical approaches, and adjusting curriculum content” (p. 351). Thus, in order to address the needs of CLD students and families, teachers should have a keen awareness of their own culture as well as that of their students, particularly in judging social skills and behaviors (Cartledge & Kourea, 2008; Savage et al., 2011).

Having specific recommendations and guidelines, can provide guidance for the work of providing culturally responsive pedagogy in schools. Cartledge and Kourea (2008) identified important elements for a culturally responsive classroom in a thorough literature review. Those elements include: Environment - (1) culturally responsive affirming environments; (2) culturally responsive teachers nurture personal development; (3) culturally responsive teachers are introspective; Teaching - (4) culturally responsive classrooms reflect a sense of urgency; (5) culturally responsive classrooms are alive with high levels of pupil academic responding; (6) effective instruction in culturally responsive classrooms is appropriately paced; (7) effective culturally responsive classrooms provide timely feedback; (8) effective culturally responsive classrooms provide constant academic monitoring; (9) effective culturally responsive classrooms build communities of learners; Addressing Behaviors (this study focused on students with disabilities) – (10) culturally responsive classrooms are disciplined; (11) culturally responsive classrooms are fair; (12) culturally responsive classroom provide evidence-based proactive

systems; (13) culturally responsive classrooms include evidence-based social skill instruction; and (14) culturally responsive classrooms use individualized behavior plans (for most troubled students).

Teel and Obidah (2008) also summarized a set of racial and cultural competencies essentially to culturally responsive teaching. Summarily, the competencies are (1) seeing cultural differences as assets; (2) creating caring learning communities where cultural different individuals and heritages are valued; (3) using cultural knowledge of ethnically diverse cultures, families, and communities to guide curriculum development, classroom climates, instructional strategies, and relationships with students; (4) challenging racial and cultural stereotypes, prejudices, racism, and other forms of intolerance, injustice, and oppression; (5) being change agents for social justice and academic equity; (6) mediating power imbalances in classrooms based on race, culture, ethnicity, and class; (7) and accepting cultural responsiveness as endemic to educational effectiveness in all areas of learning for students from all ethnic groups.

Applicable Methodologies for Studies on Professional Development Training

The individual areas of language acquisition, linguistics, and professional development are supported by studies with mixed methodologies. Linguistics is an area often explored with quantitative experimental research. However, the work of combining language acquisition theory, linguistics, and teaching ELLs in mainstream classrooms is highly complex. Seminal pieces whose purpose is to provide practical solutions to this multifaceted issue often use literature review as a methodology to synthesize what researchers have found about each aspect and guide the development of professional development to build teacher capacity and improve English language learner outcomes (Lucas & Villegas, 2010; Ballantyne et al., 2008). Fink (2014) explains, “One primary use of the literature is to describe how much is currently known

about a topic or body of research” (p. 190). Also, “Literature reviews that describe current knowledge are often published as stand-alone reports” (Fink, 2014, p. 191). While literature review was not the methodology used in this study, a strong literature review served as the basis and guided the researcher.

The purpose of action research is to solve a particular problem and to produce guidelines for best practice (Denscombe, 2014). Hence, this study employed an action research methodology as it sought to improve local conditions and create practical guidelines for future school and district PD. Hendricks (2013) states, “Quantitative data can be generated from test scores, rubric scored work..., closed-ended self-assessment items, computer-generated reports school records, check lists, tally sheets, behavioral scales, attitude scales, and closed-ended survey items” (p. 140). Quantitative data for this study consists of participant surveys taken before and after the intervention (see Appendix B), and tallied totals from observable behaviors on a checklist based on the existing Sheltered Instruction Observational Protocol (SIOP) created by Echevarría, Vogt, and Short (2010); observable elements and guidelines for culturally responsive classrooms as suggested by Lucas and Villegas (2010) and Cartledge and Kourea (2008); and suggestions based on systemic functional linguistics by Schleppegrell and O’Hallaron (2011). This instrument (see Appendix C) was used to provide teacher participants specific, personalized feedback as well as to determine the level of implementation of the components covered in the professional development (PD) workshops for all participants before and after the intervention.

Effective Presentations and Professional Development

The presentation portion of a professional development initiative impacts how well the message is received. Some tips for effective presentations include: show your passion – it should

be apparent that you have a deep, heartfelt belief in your topic; start strong - engage the audience from the very beginning; keep it short – audiences have a short limit before their minds wander from passive listening; get out from behind the podium - remove physical barriers between you and the audience in order to build rapport; use written documents (research papers, handouts, executive summaries, etc.) only for the expanded details - audiences will be much better served receiving a detailed, written handout as a takeaway from the presentation, rather than a mere copy of your PowerPoint slides (Reynolds, 2008). Froman (1994) highlighted that workplace learning should be designed to provide individuals with the knowledge and skills required to improve performance, and that individual development should also advance the overall mission or goal of the organization. Since professional development is a form of adult learning, these pieces of advice are valuable despite not being intended specifically for educational organizations.

Effective professional development for mainstream teachers of English language learners (ELLs) must be grounded in the concept that content and language are inextricably linked and that linkage has to be reflected in teachers' instructional practice (Schleppegrell, 2012). It is critical for improved teacher practice and improved student achievement to have a content focus that emphasizes teachers' understanding of and strategies they can use for teaching academic subject knowledge (Penuel, Gallagher & Moorthy, 2011; Lee, Deaktor, Enders & Lambert, 2008). Teachers need to recognize that the language used at home (basic interpersonal communication skills/BICS) is different from that required at schools (cognitive academic language/CALP), and that students will not distinguish that difference on their own. Teachers must know how to make the linguistic features of academic language explicit to students and provide students with extended linguistic resources (Spycher, 2009). Professional development

needs to build the understanding that content and language are inextricably linked through teachers' instructional practice (Schleppegrell, 2012).

Relevant Theory

Language Acquisition

Krashen's theory of second language acquisition is a guiding theory in methods that aim to make content comprehensible for English language learners (ELLs) (Echevarría et al., 2010, Gass, 1997). Krashen's theory consists of five main hypotheses: the Acquisition-Learning hypothesis, the Monitor hypothesis, the Input hypothesis, the Natural Order hypothesis, and the Affective Filter hypothesis (Krashen & Terrell, 1983). The most fundamental of Krashen's hypotheses is the acquisition-learning hypothesis, which purports that language is acquired subconsciously through meaningful interactions in the target language that focus on meaning rather than form; while learning is a conscious process that involves explicitly knowing grammar rules and error correction by the instructor. The monitor hypothesis expounds that monitoring is the practical result of learned grammar where the learner knows the rule, focuses on correction, and has time to use the monitoring process; however, this process is time consuming and results in the exchange of less information than acquisition. The Input hypothesis is the element teachers have control over in their classrooms, and has become the umbrella term when a reference is made to Krashen's entire language acquisition theory. According to this hypothesis, language learners improve and progress when they receive second language 'input' that is one step beyond their current stage of linguistic competence (Krashen, 1987). Comprehensible Input is essentially the target language that the learner would not be able to produce but can still understand. It goes beyond the choice of words and involves presentation of context, explanation, rewording of unclear parts, the use of visual cues and meaning negotiation. The

natural order hypothesis fundamentally states that there is a predictable natural order through which grammatical structures are acquired, but the order of acquisition for one's first language is not the same as the second or subsequent languages. The premise of the affective filter hypothesis is that affective variables – including motivation, self-confidence, and anxiety – can facilitate or hinder second language acquisition.

Systemic Functional Linguistics

The theory of systemic functional linguistics (SFL) is attributed to British-born Australian linguist Michael Halliday, who published the seminal paper on the topic in 1961. The perspective sparks from one question: how does language work? Specifically, the theory focuses on basic principles of language and their relation to the theory and practices of education. For Halliday, language is considered a social semiotic system- a resource for meaning across the many and constantly changing contexts of human interaction. The theory functions from the perspective that human language is complex, that all acts of communication involve choices, and that communication choices are available in any language. SFL is based on five principles: (1) paradigmatic dimension- meaning is choice, users make language choices to convey meaning; (2) stratification dimension: lexicogrammar, language is an infinite meaning-making system; (3) metafunctional dimension: ideational and interpersonal subdimensions, language has evolved based on the human need to make meanings about the world and is the means for creating and maintaining our interpersonal relations; (4) syntagmatic dimension: language unfolds as structure arranged in time (spoken) or space (written); and (5) instantiation dimension: based on the relation between an instance and the linguistic system that lies behind it, the relationship of continual feedback between instance and system, using the system may change that system.

The application of linguistic principles in mainstream classrooms is not as widespread as in language classrooms. Villegas et al. (2018) cite Schlepppegrell while explaining that schooling is essentially a linguistic process and that language is the means through which students gain access to learning and display their knowledge. Schlepppegrell and O'Hallaron (2011) note that academic language in second language (L2) is an emerging focus in applied linguistics. The authors outline three key instructional dimensions: (1) teachers need knowledge about how language works in their subject areas; (2) academic language calls for careful planning across units of instruction (macro-scaffolding); and (3) students need support and classroom activities that promote the simultaneous learning of language and content. While they recommend that more research and collaboration is needed between educational researchers and applied linguistics, they use SFL to make recommendations for teachers in the mainstream classroom:

- 1) Organize content thematically
- 2) Provide explicit instruction of academic language in each subject area
- 3) Plan challenging work that develop language and content over time
- 4) Set high expectations
- 5) Clear goals and objectives (language and content)
- 6) Create an atmosphere of trust and risk-taking

Framework for Culturally and Linguistically Responsive Teaching

After analyzing numerous studies on the subject, Lucas and Villegas (2010) developed the Framework for Linguistically Responsive Teaching (LRT). The framework identifies the orientations, knowledge, and skills of linguistically responsive teachers. It is characterized by seven interrelated elements. Lucas and Villegas caution that the framework is not intended as a

formula, rather as a guide for designing curricula for pre-service teacher education and in-service professional development (2010). The seven elements are as follows:

1. Sociolinguistic consciousness
2. Value for linguistic diversity
3. Inclination to advocate for ELL students
4. Learning about ELL students' language backgrounds, experiences, and proficiencies
5. Identifying the language demands of classroom discourse and tasks
6. Knowing and applying key principles of second language learning
7. Scaffolding instruction to promote ELL students' learning

The first element of the framework, sociolinguistic consciousness, entails an understanding that language and identity are strongly interconnected and an awareness of the sociopolitical dimensions of language use and language education. Lucas and Villegas (2010) emphasize that language is deeply entwined with a sense of identity and with social and cultural affiliations and that good teachers recognize the importance of finding ways to consider students' linguistic backgrounds in their teaching. Further, sociolinguistic consciousness is an understanding that language is intimately tied to its sociopolitical context. The authors assert that although no language variety is inherently superior to another, the languages of wealthy and powerful groups in any social context come to be seen as superior to the languages of poor and powerless groups. Lucas and Villegas caution that teachers should understand this sociopolitical dimension of language to avoid propagating the myth that lack of command of middle-class, academic English correlates with lack of ability. The second element of linguistically responsive teaching is closely tied to the first. Value for linguistic diversity, involves acknowledging students' proficiency in their home languages rather than only focusing on ELLs' imperfect

English proficiency. Lucas and Villegas (2010) assert that when teachers express interest in students' home languages, student engagement is promoted.

The third element, the inclination to advocate for ELLs, involves actively working to improve aspects of ELLs' educational experiences. Some advocacy activities mentioned are tutoring ELL students, organizing and/or supporting bilingual parent groups, encouraging colleagues to participate in professional development related to teaching ELLs, challenging the fairness of assessment practices that require ELLs with little time studying English to take standardized tests in English, and campaigning for the passage of legislation supportive of ELLs and their families (Lucas & Villegas, 2010).

The fourth element is learning about ELL students' language backgrounds, experiences, and proficiencies. In practice, Lucas and Villegas note that teachers need to help students make connections between their prior knowledge and experience, understand that ELLs are not a homogeneous group – immigrant students begin their schooling in this country with varying levels of literacy and academic skills in their first language, and U.S.-born ELLs also vary widely in their native language literacy skills. Students' backgrounds, experiences, and proficiencies affect their success in learning academic content in English. Understanding this enables teachers to adapt instruction appropriately for them (Lucas & Villegas, 2010).

Designing accessible and rigorous instruction for ELLs, the fifth element in Lucas and Villegas's framework, requires going beyond understanding students' linguistic and academic abilities by identifying the challenges they are likely to face in classroom activities and identifying the linguistic demands of oral and written discourse. The authors outline that the analysis involves identifying the key vocabulary students must understand to have access to curriculum content, understanding the semantic and syntactic complexity of the language used in

written instructional materials, and knowing the specific ways in which students are expected to use language to complete each learning task (Lucas & Villegas, 2010).

The sixth element of the framework is understanding of the process of learning a second language and the ability to apply this understanding in teaching ELLs. Of the plethora of language learning principles Lucas and Villegas (2010) examined in their review of literature, they chose to highlight four of them. One principle of note is that in order to learn a second language, learners must have direct and frequent opportunities to interact with people who are fluent in that language; another is that conversational proficiency in English is fundamentally different from academic proficiency; a third is that a learner's home language plays a critical role in his or her learning of a second language, so teachers need to know about students' home language proficiency; the fourth principle noted is that language learning is enhanced when students are in a safe rather than a threatening environment.

The last element of Lucas and Villegas's framework is instructional scaffolding. The authors note that scaffolding is the instructional response to Vygotsky's (1978) theory of the zone of proximal development (ZPD) – the metaphorical space in which a learner can accomplish, with the assistance of a more capable peer, tasks he or she could not accomplish alone (Lucas & Villegas, 2010). Some examples of how teachers can scaffold the learning of new content include eliciting students' relevant prior knowledge and experience, providing visual and other extralinguistic materials to make key ideas more accessible, making multiple and multilingual written texts related to the material available to students, and by organizing collaborative learning activities through which students can learn from and assist each other.

Lucas and Villegas (2010) assert that teachers of ELLs should have an understanding of the structure of English and of the process of second language learning as well as the ability to

apply these understandings in their teaching. Additionally, they believe it is imperative that teachers of ELLs should develop the perspectives, dispositions, and commitments outlined in their framework. Further, those who educate teachers have to tailor teacher training in ways that best incorporate the framework, “Having determined the orientations, knowledge, and skills needed by teachers to teach ELLs well, teacher educators must then decide how to organize learning experiences to support the development of that expertise” (Lucas & Villegas, 2010, p. 308). The framework for LRT is intended for teachers of ELLs, but the transferrable skills it outlines, would benefit all learners as linguistic awareness is important in a continuously diverse environment.

Chapter III: Methods

This action research study consisted of two iterations of a professional development workshop intervention and a final iteration as a professional development plan in which the researcher sought to connect theory to practice. Norton stated, "Since it (action research) is cyclical and collaborative, it is in a position to build bridges between theory and practice, and this is where it has the potential to make the greatest impact" (2009, p. 66). The study's three iterations included: (a) PD cycle one which consisted of four teacher participants trained, (b) PD cycle two consisted of five teacher participants trained, and (c) the final cycle was a PD framework created for future use at the local school/district level. Analysis of the various data strands and deep reflection allowed for changes to the initial PD training which was then administered to five teacher participants. After final data analysis, the results were used to create the PD framework (see Appendix O).

Intervention

This study attempted to equip participating mainstream teachers of culturally and linguistically diverse (CLD) students and English language learners (ELLs) with the knowledge, frameworks, and methods to address the learning needs of that specific population through a professional development (PD) initiative. The specific intervention consisted of teacher participants attending one of two pre-planned half-day PD sessions on sheltered instruction strategies and creating culturally responsive classrooms titled "Strategies for Culturally and Linguistically Diverse Classrooms". The first iteration of the PD session/workshop was divided into three parts including sixteen PD components: Part I- Terminology and getting to know our learners (components a-e); Part II- Stages of language acquisition, research-based strategies, what we (at the research site) are doing well, and areas of potential growth (components f-k);

Part III- From theory to action: Applying strategies to your classroom (components l-p). Each part was prepared to be delivered in approximately one hour, including relevant activities. The components that were divided into three parts included:

- a. A “hook” for perspective.
- b. Terminology.
- c. Background information on national trends of the ELL population.
- d. Cultural and linguistic demographics of the research site.
- e. A YouTube video for perspective on difficulties an ELL may experience in reading and pronunciation.
- f. A summary of the stages of language acquisition.
- g. A graphic and explanation on how motivation/acculturation impact language acquisition.
- h. How we measure language proficiency in Connecticut (LAS Links) and how a students’ language level impacts their learning/access to the curriculum.
- i. An overview of Connecticut ELL Standards.
- j. A summary of how language acquisition theory, linguistics, and comprehensible input can be utilized to teach language via classroom content (sheltered instruction).
- k. Ways in which the public magnet school’s theme (Montessori) has inherent opportunities and supports for CLD students.
- l. Examples of language and content objectives.
- m. Information and opportunities for practice with four of the eight SIOP components and ten elements of culturally responsive classrooms.
- n. Collective feedback from pre-intervention observation, highlighting areas of strength and needs for improvement.

- o. A template and instructions for continuing to plan and deliver lessons applying the strategies and elements introduced in the PD session/workshop.
- p. Grade-level and content area specific strategies and printed resources.

The researcher-presenter began the PD session with a “hook” to engage and capture participants’ attention as well as provide perspective and illustrate cultural relevancy. After welcoming participants, the researcher-presenter began the workshop by asking participants to listen and reading the following anecdote out loud,

Philosophical differences in education have a long history. An instructive one, described by Benjamin Franklin, arose in 1744 between British colonists and the Six Nations, a confederation of Iroquois tribes. Treaty negotiators for the colony of Virginia, looking for peaceful ways to assimilate the Indians, proposed to provide free tuition for several of their youths at the college of William and Mary. The offer was politely declined. According to Franklin, a Six Nations elder explained their rationale as follows:

[Y]ou who are wise must know that different nations have different conceptions of things, and you will therefore not take it amiss if our ideas of this kind of education happen not to be the same with yours. We have had some experience of it. Several of our young people were formerly brought up at the colleges of the northern provinces, they were instructed in all your sciences, but when they came back to us they were bad runners, ignorant of every means of living in the woods, unable to bear either cold or hunger, knew neither how to build a cabin, take a deer, or kill an

enemy, spoke our language imperfectly, were, therefore, neither fit hunters, warriors, or counselors; they were totally good for nothing.

We are not, however, the less obliged by your kind offer, though we decline accepting it, and to show our grateful sense of it, if the gentlemen of Virginia send us a dozen of their sons we will take great care of their education, instruct them of all we know, and make Men of them.

(Reyes & Crawford, 2010, Kindle loc. 542)

After sharing the above as a hook, the researcher-presenter gave participants a few minutes to reflect on it and optionally make notes of their thoughts. The researcher-presenter encouraged the participants to keep their thoughts about the anecdote present while participating in the rest of the workshop and continued by giving an overview of the three parts and content of the PD workshop that the participants would experience.

Part I included defining some the terminology that would be used throughout the workshop within the context and scope of the PD's purpose, answering any clarifying questions, and encouraging participants to ask for clarification at any point during the PD session. The terminology included English language learners (ELLs), culturally and linguistically diverse (CLD) students, mainstream teachers, English as a second language (ESL), bilingual education, basic interpersonal communication skills (BICS), cognitive academic language proficiency (CALP), and home language (L1). Part I also included background information on national trends of the ELL population highlighting the rapid growth of that demographic and the implications on public schools; the cultural and linguistic demographics of the research site such as the racial makeup of the students, ELLs by grade level, and languages spoken and by how many students; and a YouTube video featuring a comedy sitcom clip to perspective on

difficulties an ELL may experience in reading and pronunciation (further explained in Appendix O).

Part II of the workshop began with a summary of the stages of language acquisition – from preproduction to advanced fluency – based on Krashen and Terrell (1983). The stages were further supported by a graphic and explanation on how motivation/acculturation impact language acquisition (included in the PD guide in Appendix O). The researcher-presenter explicated how language proficiency is measured in Connecticut and how a students’ language level impacts their learning/access to the curriculum. Connecticut uses the LAS Links annual assessment, which measures proficiency in the four language domains (reading, writing, listening, and speaking). The researcher-presenter described the levels of proficiency determined by the assessment and the requirements for “exiting” or no longer being required to provide direct services – such as ESL or bilingual education – to ELLs. The five LAS Links levels (1- Beginning, 2- Early Intermediate, 3- Intermediate, 4- Proficient, and 5- Above Proficient) were delineated and cross-referenced with the stages of language acquisition.

Part II of the PD intervention continued with an overview of Connecticut ELL Standards; a brief summary of how language acquisition theory, linguistics, and comprehensible input can be utilized to teach language via classroom content (sheltered instruction); and how the public magnet school’s theme (Montessori) has inherent opportunities and supports for CLD students through the use of manipulatives, visuals, and flexible grouping. The majority of the time for Part II was spent summarizing the four Sheltered Instruction Observation Protocol (SIOP) components that participants would be focusing on for the purpose of this study and their corresponding features: Lesson Preparation, Building Background, Comprehensible Input, and Interaction. Eleven elements of culturally responsive classrooms and ways in which they

coincide with sheltered instruction features were also introduced – (1) Content organized thematically, (2) Explicit teaching of academic language, (3) High expectations, (4) Atmosphere of trust & risk-taking, (5) Scaffolded instruction, (6) High levels of pupil academic responding, (7) Teacher monitoring & feedback throughout lesson, (8) Disciplined and fair classroom, (9) Proactive systems in place, (10) Social skills instruction intertwined with content/lesson, (11) Comprehension and learning of objectives assessed.

Part III focused on continuing to learn about the sheltered instruction and culturally responsive classroom features by putting them into practice. The researcher-presenter led this part of the workshop with examples of language and content objectives that were presented considering that the participants of the first iteration were teachers of third through sixth grade. The two types of objectives were defined by the researcher-presenter as indicated below, followed by practical examples.

Content Objective: identifies what students should know and be able to do at the end of the lesson and leads to assessment.

Ex 1: We will find the lowest common multiple (LCM) of 2 or more numbers.

Ex 2: Today you will learn about the causes of the American Revolution.

Language Objective: a process-oriented statement (action verbs) of how students will use English with the content (listening, speaking, reading, or writing).

Ex 1: You will write the steps used to solve the problems.

Ex 2: You will be able to explain the connection between the French and Indian War and the American Revolution.

In preparation for the opportunity for practice with the four SIOP components and eleven elements of culturally responsive classrooms, the research-presenter provided participants collective feedback from the pre-intervention observations, highlighting areas of strength and needs for improvement. The researcher-presenter led participants through reflecting on what features and elements they collectively were already implementing prior to the PD workshop by sharing a color-coded version of the adapted observation protocol used to conduct the classroom observations (see Appendix G). Elements written in green font were implemented consistently and the researcher-presenter complimented participants for using strategies that are indicators of good teaching and that coincide with ELL and culturally responsive classroom best-practices. Participants were asked to continue doing those things in a purposeful manner, but – in preparation for the more practical Part III – to also look at the orange items which were observed infrequently or inconsistently and the red items which were rarely observed or not observed at all.

Lastly, Part III culminated with a template and instructions for continuing to plan and deliver lessons applying the strategies and elements introduced in the PD session/workshop (see Homework/Specific Expectations that Knowledge will be Applied in Appendix O). Participants used grade-level and content area specific strategies and resources to work in grade-level teams and complete the prompt: *Using the Sheltered Instruction and Culturally Responsive Classrooms Guide, choose one guideline/feature to focus on for your present or next content unit/lesson. Use the supplemental handouts to find at least one strategy that helps support that guideline/feature. Fill in the template to add activities using strategies that will assist your ELL and CLD students access the content in your classroom.* The intent of the final activity was for participants to put

theory into practice, to collaborate with colleagues, and to have a self-designed plan that would support implementation of the strategies in classrooms after the PD workshop.

The second iteration of the PD intervention included the same elements as the first, but based on participant feedback via surveys and interviews, the following were added to refine the intervention after data analysis:

- a. An additional activity to establish perspective in which teacher-participants had to imagine themselves in a foreign country, illustrate how conversational language is acquired faster than academic language, and create another opportunity for discussion (further explained in the final PD plan, Appendix O).
- b. An additional activity where participants reviewed the strategies, discussed them in grade-level teams, and identified something(s) they do in their classrooms already, something(s) they sometimes do but can modify, and something(s) they would like to try to implement.
- c. In order to implement the additional opportunities for practice and interaction, an additional hour of time was added to the workshop which was also rescheduled from a previously planned date.

Before the PD intervention, participants voluntarily completed a survey that assessed some of their needs and perceptions. After the PD, participants completed another survey to assess if overall perceptions seemed to change and for the researcher to gauge if any unanswered questions could be pre-emptively addressed in the next iteration and, ultimately, in the final PD design (see Appendix B). Further, this pre-post measure helped the researcher understand if there was a difference in what teachers knew as a result of training. In addition, participants were interviewed after each PD session in order for the researcher to assess participant

perceptions and her own strengths and areas of growth related to the content and delivery of the PD. Field observations were conducted before and after the intervention using elements from the SIOP protocol and a checklist developed based on research-based recommendations for delivering culturally responsive pedagogy to see if the PD had any impact on teachers' practice (see Appendix B).

The final iteration – the PD protocol – further refined and explained the PD components guided by the analyzed data from the second iteration as well as secondary data that consisted of district administrators' collective responses to a question about what good and bad PD look like. The researcher was a participant in an exercise that led to generating a list of things that can make a PD experience be perceived as good or bad. The exercise was led by the superintendent of schools and was intended for district administrators to compile and refer to the list while planning PD for their buildings. The researcher included the list as secondary data in the results section of this report as well as the final PD protocol as it is relevant to the topic of this research and applicable to the researcher's plans of continuing to contribute to district professional development design and planning.

Procedures

Research Questions

Overarching Question:

1. Did professional development for mainstream teachers of culturally and linguistically diverse students have an impact on teachers' (a) Lesson Preparation, (b) Building Background, (c) Comprehensible Input, (d) Interaction, and (e) practice of elements for culturally responsive classrooms?

Quantitative Hypothesis:

2. Professional development training for teachers improves their ability to implement sheltered instruction strategies and empirically-based elements of culturally responsive classrooms that are beneficial to culturally and linguistically diverse students.

Qualitative Research Questions:

3. What do teacher participants think about the applicability of professional development with strategies to support culturally and linguistically diverse students?

4. What is the teacher participants' comfort level with teaching culturally and linguistically diverse students after receiving professional development (PD) on the topic?

Role of the Researcher

The attribute that most applies to this study is epistemology as the researcher constructed knowledge using various sources of data. The overarching worldview of the researcher-practitioner is pragmatism. As the stance implies, findings from the qualitative and quantitative data helped form knowledge that can be compared and combined, increasing the credibility of the study's findings into what Patton (2003) describes as theory triangulation.

At different stages in the study, the researcher approached the data collection and analysis from various world views. Particularly, a post-positivist view was employed to answer the confirmatory research question seeking to affirm that PD affected the implementation of strategies. In addition, participant interviews were aligned with a constructivist worldview in which knowledge is co-constructed by the researcher, the outside interviewer, and the participants. A constructivist worldview is apparent as well while the researcher presented the PD workshop, becoming a participant herself. Pragmatism guides the idea that various forms of qualitative and quantitative data- interviews, surveys, and quantitative observation protocol- were blended to create a representative understanding about the PD model.

The researcher-administrator had both an etic and an emic perspective as she was both the PD presenter and the researcher in this study. While observing teachers and collecting and analyzing data, the researcher held an outsider's perspective. While conducting the professional development as an administrator at the study site, the researcher embraced an insider's perspective.

Bounding the Case

This study was bound by the setting, an elementary school in the Northeast, United States with 350 students in grades Pre-K through sixth. The school is a public magnet school with a Montessori theme. At the elementary level, the school uses traditional teaching methodologies with elements of Montessori philosophy. Students are not officially labeled ELLs until Kindergarten (K). The total population of students in grades K-6 is 261, of which 35 (13.4%) students are identified as English language learners (ELLs). English learners are supported with pull out services by a certified Teaching English to Speakers of Other Languages (TESOL) and a bilingual teacher- depending on whether parents choose bilingual services or opt out - for about 30 minutes per day. Bilingual services are provided in Spanish as that is the language for which the threshold outlined in the CT bilingual statute – 20 students with the same home language – is met. For the majority of the school day, all ELLs participate in mainstream academic classrooms with their monolingual peers. As a result, most mainstream teachers teach ELLs in their classrooms. In addition, the school boasts a population that is culturally diverse. Over 70% of the students are identified as a race or ethnicity other than white, and 53% of the students are Hispanic/Latino.

The population for this study were multi-age classroom teachers serving students in grades Pre-K to sixth. All of the school's certified teachers, approximately 29, were scheduled to

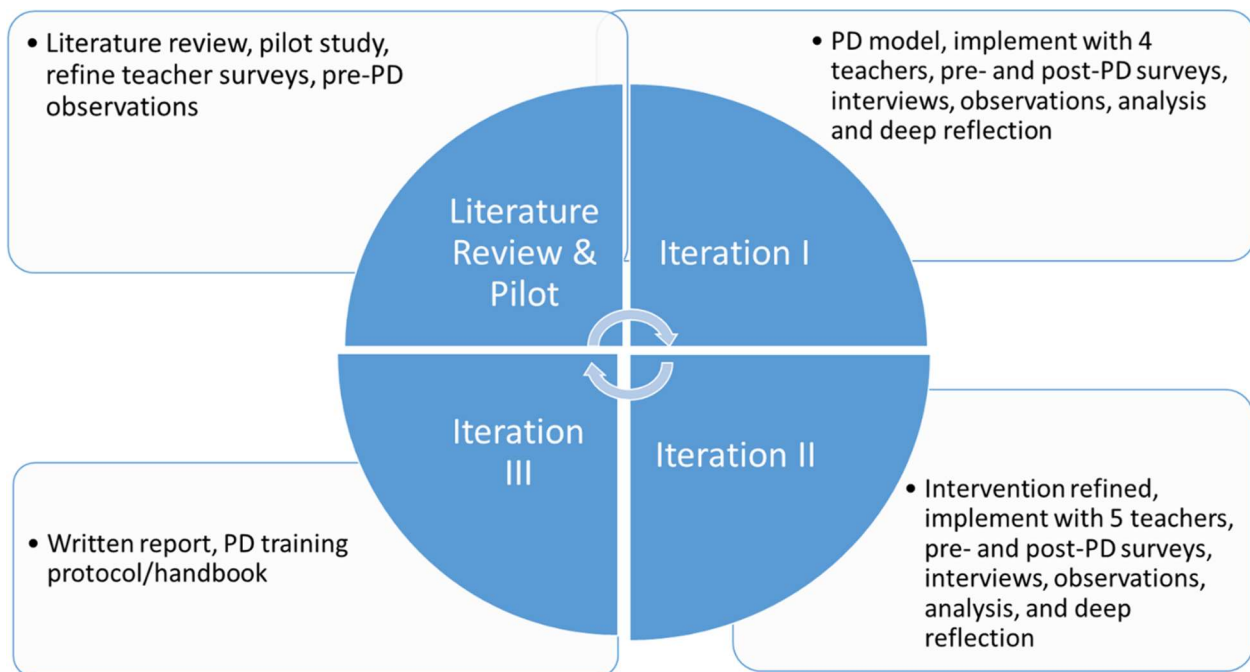
attend one of the two building-level PD days during which the workshops created for this study were administered. A total of four teachers who initially received the intervention met the sampling criteria and were considered participants for the purposes of this study. After initial data analysis, the intervention was refined and administered to additional teachers, of which five met the sampling criteria and became study participants. The professional development intervention occurred during two PD half school days (approximately 180 minutes in the first iteration, and 240 minutes in the second iteration for which an additional hour was added based on participant feedback) that occurred within one month of each other. Data collection occurred over a three-month period that allowed for analysis and refinement of the final product which are PD training guidelines that were shared with the district.

Data Collection

For all of the study components with the exception of the surveys, the purposeful sample included nine total participants - nine certified elementary teachers at a public Pre-K to 6th grade elementary school. The sampling criteria (Collins, 2010) was aligned with the problem and purpose of this study to include: (a) mainstream classroom teachers, (b) teachers who have culturally and linguistically diverse students in their classrooms, (c) teachers who are not certified to teach English to speakers of other languages (ESOL), and (d) teachers who are willing to be participants in all three data strands. There were 35 identified ELL students at the elementary school, and all of them participated in mainstream classrooms for the majority of the day, with pull-out ESOL or bilingual services accounting for about 30 minutes of the seven-hour school day. Further, the diverse student population was 53% Hispanic/Latino. The purposeful sample allowed the researcher to tap into multiple perspectives from different grade levels.

The study was guided by secondary source data in the form of a thorough literature review as well as data collected during the pilot study. Pilot study findings, initial observation data, and the literature review were used to design the survey instruments and the content of professional development intervention. Prior to the first iteration, the survey instruments were piloted with an audience of teachers, administrators, parents, college students, college professors, and other school staff who attended a conference on bilingual education hosted by a Connecticut public university (see Appendix D). After analysis and deep reflection, the researcher refined the instruments to ensure the questions were clear and could yield the data sought to answer the research questions (see Appendix A). The survey link was available to all teachers who attended the workshop that served as the PD intervention, thus the number of participants varied for the surveys and is outlined in the results. Initial teacher observations helped determine areas of strength and needs to highlight during the first iteration of PD. After the first iteration, analysis and deep reflection of the survey data, post-PD observations, and interviews were used to modify the PD for the second iteration from which five teachers emerged as participants. Each step and iteration helped determine teacher and classroom needs that would be targeted and used in tailoring the third iteration - a theoretically sound PD training handbook with components and measures for teachers and administrators in the district to use as they see fit (see figure 2).

Figure 2 Study Design



Survey

The survey instruments that were used initially to gauge teacher perspectives and identify learning that was apparent as a result of the PD intervention (see Appendix A) were created by the researcher, and were refined after the researcher piloted them with an audience of teachers, teachers in training, college professors, parents, and others that attended a conference titled “Beyond Monolingualism” in October of 2017 (see Appendix D). The survey instruments were designed to understand what teacher participants knew about the students in their classrooms’ linguistic backgrounds, teacher attitudes toward bilingualism, and what teachers were interested in learning through PD and in-service training. The surveys were available as a paper copy or a link to a Survey Monkey web version for any teachers attending the PD sessions who voluntarily chose to complete them.

Observations

Teachers' implementation of strategies that help make content comprehensible for ELLs and CLD students through sheltered instruction and culturally responsive pedagogy were measured by an adapted version of the Sheltered Instruction Observation (SIOP) protocol - developed by Echevarría and Vogt (2010) - and a checklist based on research-based recommendations for culturally responsive classrooms created by the researcher. Sheltered instruction uses specific strategies to address ELL students' linguistic needs through content-based lessons. The SIOP framework and protocol are made up of eight components, but based on the intent of this study and the content of professional development design, the adapted protocol included four SIOP components that PD and field observations focused on in order to complete the investigation within its boundaries.

The observation protocol and checklist (see Appendix B) was based on four SIOP components to look for in order to promote objectivity and increase validity of the observations: Lesson Preparation, Building Background, Comprehensible Input, and Interaction which are observable by looking for the recommended SIOP features suggested for each component. The first component, Lesson Preparation, involves six observable features: written content objectives, written language objectives, content concepts, supplementary materials used, adaptation of content, and meaningful activities. The Building Background component has three observable features: concepts explicitly linked to students' background experiences, links explicitly made between past learning and new concepts, and key vocabulary emphasized. Comprehensible Input is characterized by three features: speech appropriate for students' proficiency level (e.g., slower rate, enunciation, and simple sentence structure for beginners), clear explanation of academic tasks, and a variety of techniques used to make content concepts clear (e.g., modeling,

visuals, hands-on activities, demonstrations, gestures, body language). The last SIOP component observed for the purposes of this study was Interaction, which has four key features to be observed: frequent opportunities for interaction and discussion between teacher/student and among students, which encourage elaborated responses about lesson concepts; grouping configurations that support the language and content objectives of the lesson; sufficient wait time for student responses consistently provided; and ample opportunities for students to clarify key concepts in their first language (L1) as needed with aide, peer, or L1 text.

The researcher conducted non-evaluative, but unannounced, observations in participants' classrooms one month to two weeks before and two weeks to one month after the professional development intervention took place. The observations were completed with participant consent and using the adapted SIOP checklist (see Appendix B) – described above – to determine if the professional development intervention impacted participants' practice. In both sets of observations – before and after the PD intervention – the researcher entered the participants' classrooms during literacy lesson time for approximately 20 minutes and rated the observable components from the adapted protocol that were present in the classroom and lesson. The totals from the number of observable components were recorded on paper for each classroom before and after the intervention and were later transferred onto digital spreadsheets to ease data analysis and reduce statistical errors that could occur from repeated typing/writing of the same information. While no formal observation validation process was used, construct validity was pursued by using elements from a well-established observational protocol and well-established underlying theories and having the researcher, who is experienced and trained in sheltered instruction strategies, perform the observations.

Interviews

The third form of data in this study were semi-structured interviews conducted after the intervention by an outsider who did not work in the school district or have a relationship with the participants. The interviewer was a University of Bridgeport School of Education doctoral program student that was trained in qualitative research methods in order to maintain participant response anonymity, and to eliminate any possible bias as the researcher was in a leadership position at the research site. The interviewer signed a confidentiality agreement (see Appendix E) to ensure she adhered to ethical guidelines and did not disclose the identities of the participants to the researcher or anyone else.

Professional development workshop participants were offered the option of participating in one interview and given the interviewer's contact information in writing. The interviewer was available to privately conduct 30 minute interviews for participants that volunteered by contacting the interviewer directly. Interviews were scheduled and conducted one week to two weeks after the PD intervention in both the first and second iterations of this study. Participant consent was acquired and both the researcher and interviewer verbally reminded participants that they could opt out of the interviews at any point until their completion. The interviewer recorded the interviews on a high-quality digital audio recorder and transcribed them using word processing software. Once transcribed, the interviewer offered the participants a chance to review the transcripts, then deleted the recordings, and finally the interviewer provided the researcher with hard copies of the transcribed interviews that did not contain identifiable participant information.

Data Analysis

Survey

Once the survey data were collected the following steps were taken, “The steps of analysis for quantitative forms of data include reporting, comparing, and displaying data” (Hendricks, 2013, p. 140). For closed-ended items such as surveys, Hendricks recommends that the data is reported for each participant and for each item. This can be done digitally on a spreadsheet or using statistical software. The researcher provided the item by item summaries on multiple tables as well as narrated in the results section of this report. Hendricks (2013) also notes that the researcher needs to explain results in a way that answers the research question(s). Individual open-ended survey items were organized on a spreadsheet, printed, and thoroughly analyzed. Two proportion z-tests were used to determine if the proportions of yes/no responses significantly changed for certain questions and used the results to respond to the research questions.

Observations

Before and after the first two PD iterations, teacher-participants were observed using the adapted SIOP protocol and culturally responsive classroom checklist (see Appendix B). The researcher observed participants’ classrooms during literacy lesson time for approximately 20 minutes and rated the observable components from the adapted protocol. After each observation, the totals from the number of observable components were recorded on paper for each classroom and were later transferred onto digital spreadsheets to ease data analysis and reduce statistical errors that could occur from repeated typing/writing of the same information. Hendricks (2013) explains the usefulness of checklists and tally sheets when used to record behaviors and events, “This information, particularly when considered with other data sources can provide useful information about differences in increased achievement between and among groups” (p. 147). T-tests were run on the tallied scores by copying and pasting the data from the spreadsheets into

SPSS® statistical software to determine if there were statistically significant differences before and after the intervention for each iteration as well as for all the participants combined. Specifically, the means of the tallied scores for teachers' observations before and after the intervention were compared to see if there was a statistically significant difference that supported the quantitative hypothesis. The 27 individual items/components on the checklist were also compared using t-tests and reviewed to determine if there was a change in the application of specific strategies or elements that may have been influenced by the PD intervention – to answer the first research question. While using repeated t tests creates room for error, the data entry was performed with care and results were used as another form of information useful for better understanding the phenomenon.

Interviews

Open-ended, semi-structured interview questions designed by the researcher provided structure (see Appendix C) for the interviewer and participants. Care was taken to ensure that the questions were not leading, and that they were sufficiently open-ended to allow participants to be the ones that provide the data that they felt was most relevant. The interviews were conducted by a researcher and language teacher practitioner that did not work in the school district that the study took place in, and did not have a relationship with the participants, in order to eliminate possible bias due to the researcher serving in a supervisory capacity. After the first iteration four participants voluntarily participated in interviews, and after the second iteration five participants did the same. The interviewer was available to privately conduct 30 minute interviews for participants. Interviews were scheduled and conducted one week to two weeks after the PD intervention in both the first and second iterations.

Hendricks (2013) recommends, “Data should be audio recorded and then transcribed” (p. 156). Interviews were conducted by an impartial party – a teacher and doctoral student not affiliated with the study site or participants – that was trained in qualitative research methodologies, and recorded on a high quality digital audio recorder. Recordings were transcribed by the interviewer, in order to maintain participant anonymity, and stored on a password protected personal computer. The interviewer offered participants the opportunity to review transcripts prior to presenting the transcript to the researcher. Interview transcripts were printed by the interviewer and given to the primary researcher in the printed format. The researcher then coded for themes and conducted a thematic analysis. Charmaz (2014) explains one of the benefits of initial coding, which was the first coding procedure used to analyze the transcribed interviews, “Initial grounded theory coding can prompt you to see areas in which you lack needed data” (p. 117). Interview transcripts were initially coded by reading the printed transcripts, re-reading and highlighting possible codes and noting possible themes. Further, paragraphs containing initial codes were printed on index cards, labeled, and sorted to ease further analysis. The process of initial coding is much like Norton’s first stage of thematic analysis, immersion, where the researcher jots down any general themes noticed while reading the first transcript. The other six stages of analysis (Norton, 2009) that the researcher followed included: (a) generating categories- closer reading, one by one, looking to generate as many categories as possible and to write down a label that best describes each category; (b) deleting categories- delete categories that only have one or two examples (unless well-supported in other research), or that significantly overlap with others; (c) merging categories- collapse as many categories as possible and relabel them as themes; (d) checking themes- reread transcripts alongside the list of themes to check for accuracy and revise if necessary; (e) linking themes-

analyze the data taking caution not to simply paraphrase the data, making notes of any relationships or links the researcher sees between themes; and (f) present the findings. All printed material such as transcripts were stored in a locked file cabinet to be shredded/discarded no more than one year after data analysis was completed.

Sampling

Collins (2010) explains the two major decisions that a researcher must make when initiating the sample process/design for a study. First, she clarifies that the researcher must select a sampling scheme; that is, to decide on the strategy by which one will select the participants. Second, a decision has to be made on sample size, or the number of participants for the study. The steps explained by Collins (2010) that were used to determine participants for this study include: (a) determine the mixed research purpose, (b) determine the mixed research question, (c) select the mixed research design, (d) select the mixed sampling design, and (e) select the individual sampling schemes and sample sizes per phase. With those steps completed, the sampling criteria for this study was aligned with the problem and purpose to include: (a) mainstream classroom teachers, (b) teachers who have culturally and linguistically diverse students in their classrooms, (c) teachers who are not certified to teach English to speakers of other languages (ESOL), and (d) teachers who are willing to be participants in all three data strands. Since those criteria in conjunction with the limitations of teacher time, scheduled PD times, and mobility within a schools setting resulted in a convenience sample of nine teachers, the researcher determined the sample size for iterations one and two – four teachers who were considered participants for this study as they met all of the criteria received the first iteration, then five teachers who were considered participants received the refined intervention.

The total convenience sample included nine certified elementary school teachers that participated in professional development on strategies to address the needs of English language learners (ELLs)/culturally and linguistically diverse (CLD) students and create culturally responsive classrooms. However, a stratified purposeful sampling scheme was used within the convenience sample to decide who was to receive the first iteration of PD, and who received the second. The convenience sampling frame was divided into strata, specifically by grade levels taught. The school had a combined grade-level structure in which there were three grade levels. The Primary Team was made up of five teachers that taught Pre-K 3, Pre-K 4, and kindergarten students in their classrooms. The Lower Elementary Team was made up of five teachers that taught grades one, two, and three combined in their classrooms. Lastly, the Upper Elementary Team consisted of four teachers that taught in classrooms where grades four, five, and six were combined. The first iteration of the intervention was delivered to Upper Elementary teachers, and the second iteration and refined intervention included the Primary and Lower Elementary teachers. The participant sample consisted of the teachers who voluntarily participated in all components of this research study - the quantitative (surveys and observations) and qualitative (participant interviews) data strands throughout the study.

Credibility/Validity

Using carefully planned data collection and analysis methods, and describing the procedures in detail helped eliminate threats to validity and ensure the credibility of this study. In addition, in qualitative research, the researcher serves as an instrument (Xu & Storr, 2012) with a central role in the research. The researcher for this study has expertise in the field of language acquisition and multicultural education and extensive experience as a practitioner. The researcher taught Spanish and English for Speakers of Other Languages (ESOL) for ten years

and in 2011 obtained a certificate of advanced graduate studies (CAGS) from the University of Connecticut in Curriculum and Instruction with a concentration in Bilingual and Multicultural Education. In addition, the researcher possessed over seven years of experience in curriculum development for students and professional development for teachers and administrators in the areas of language development and culturally responsive teaching. As a result, the researcher's knowledge and experience strengthen the credibility of this study.

Qualitative and quantitative data helped form knowledge that could be compared and combined, increasing the credibility of the study's findings as suggested by Patton (2003). The researcher defended the study's credibility via data triangulation. Multiple sources of data including observations, interviews, and surveys gave the researcher data thick enough to demonstrate the truth of the outcomes. In addition, the researcher used an expert audit to confirm the results of interview coding. An outsider who was a doctoral student trained in qualitative research methodologies conducted the interviews to maintain participant anonymity, and reviewed the researcher's analysis of the interview data to confirm whether inferences based on the data were logical - looking carefully at analytical techniques used, appropriateness of category labels, and quality of interpretations (Lincoln & Guba, 1985).

Additionally, the researcher took steps during data analysis to promote validity. The coding process was performed carefully in order to increase validity; as special care has to be taken to not insert one's own biases in the interpretation of the data. Whether one is performing word-by-word, line-by-line, or incident-with-incident coding, Charmaz (2014) points out that, "Careful coding also helps you to refrain from inputting your motives, fears, or unresolved personal issues to your respondents and to your collected data" (p. 133). Outcome validity was addressed via thick descriptions throughout the study paper and in the presentation of results.

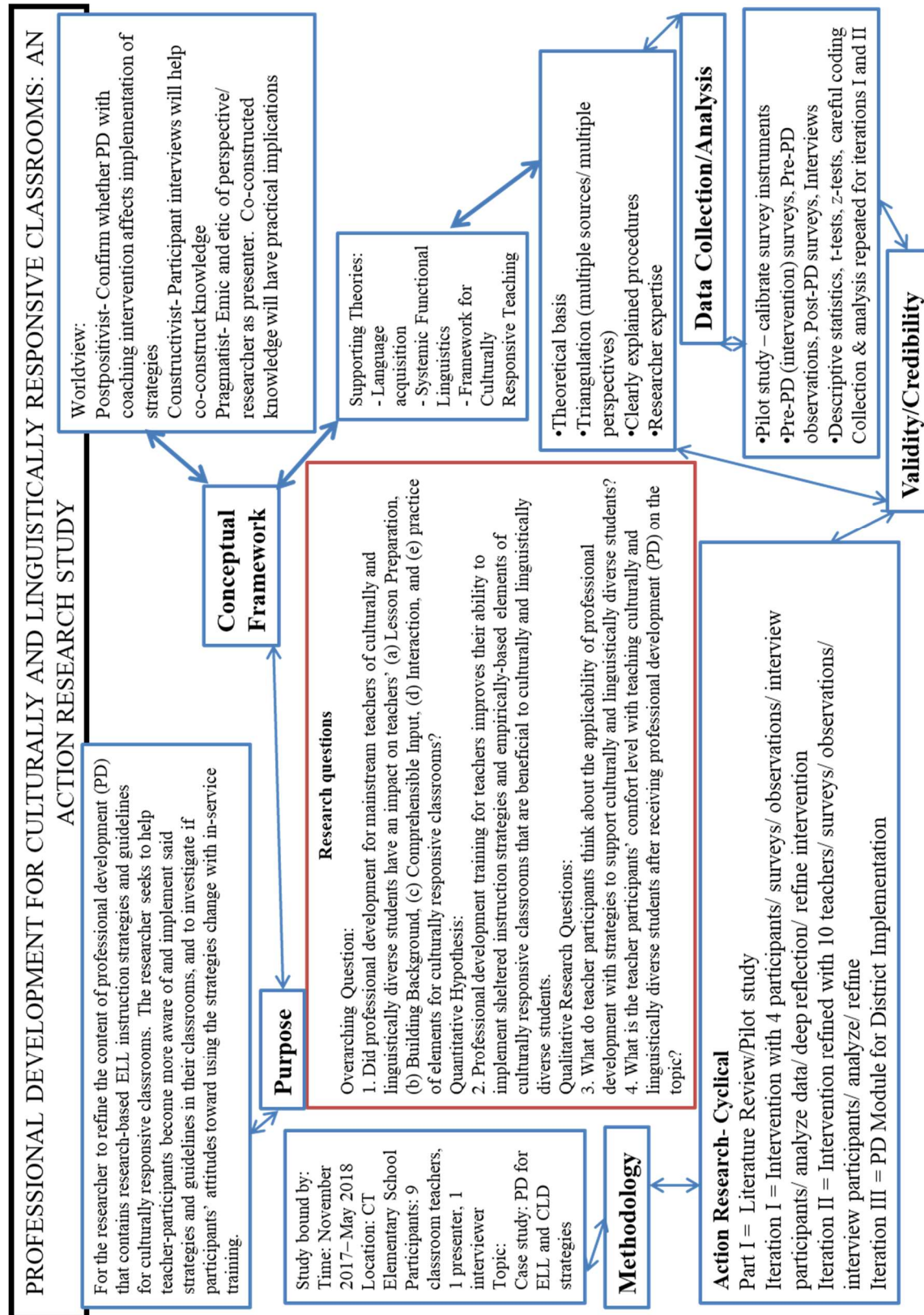
Hendricks (2013) explains that, “Providing thick description means describing in detail the setting, participants, interventions and research methods employed in the study...When the research setting shares characteristics with the audiences’ or readers’ setting, generalizability is increased” (p. 128). In addition, process validity was addressed through the use of triangulation, “When a researcher uses multiple sources to corroborate findings...the credibility of the findings is increased” (Hendricks 2013, p. 128). Qualitative and quantitative data helped form knowledge that was compared and combined, increasing the credibility of the study’s findings as suggested by Patton (2014).

When analyzing qualitative data, especially when a small sample is involved, it is difficult to say to what degree a study should be generalizable. Maxwell (2013) captures this sentiment, “The appropriate answer to almost any general question about the use of these methods is ‘it depends’” (p. 87). Some studies, such as this one, focus on specific populations and the intent of the study may be to find out something that only applies to a small group. Patton (2014) provides an example, “The question the director faced was whether to place four specific students on a special diet at their request. The information he needed the consequences of that specific change and *only* that specific change” (Kindle loc. 8760).

This action research study, conducted in a single elementary school setting may add to the growing body of research outlining strategies for PD that improves instruction for ELLs and CLD students. However, since CLD students are not a homogenous population, and the convenience sample was small in size, the researcher does not claim that results are generalizable beyond the scope of a specific school district. Since the study yielded positive and promising results, it may be something worth replicating in other settings, but without a larger sample and multi-site application claims of generalizability are not being made. In order to reinforce the

overall validity/credibility for this study on mainstream teachers of CLD students, all procedures were written in a clear and detailed manner to ensure transparency and to illustrate the rigor in every step of the process. The methods and procedures are summarized in figure 3, the concept map.

Figure 3 Concept Map



Chapter IV: Results

This action research study sought to refine the content of professional development (PD) on research-based instruction strategies for culturally and linguistically diverse (CLD) students and guidelines for culturally responsive classrooms. It was a priority to help teacher-participants become more aware of and implement empirically-based strategies in their classrooms. In order to predict that the strategies would move beyond theory into implementation, it was important to investigate if participants' perceptions and awareness of using the strategies changed with in-service training. Since professional development is an effective way of improving practice, the researcher-practitioner intended to improve her own process of designing the PD, which can result in improving local conditions.

Pilot Study Results/Trends

Prior to the action research phase of the study, the researcher piloted the survey instrument with participants at a bilingual education conference. While the pilot survey sought to obtain preliminary data that could inform the PD intervention content, it was also administered to determine if (a) the instructions were comprehensible, (b) if the wording of the survey was appropriate, and (c) if the survey measured what it intended to measure. The pilot survey sought to gather perceptions of parents, teachers, and other adult participants in a conference about bilingual education, in order to inform the researchers' planning for the professional development intervention.

Based on registration information, approximately 80 people attended the conference where the pilot study surveys were administered. Forty-five participants completed the pre-conference survey and seventeen completed the post-conference survey (see Appendix D).

Pre-conference Survey

Of the pre-conference survey participants (n=45), 20 participants identified as college students or pre-service teachers (44.4%), 13 identified as teachers (28.9%), five identified as school/district leaders or coaches (11.1%). Two college professors, two parents, one consultant, one paraprofessional, and one person did not identify their role. All (n=45) participants live and work in Connecticut. When asked whether their knowledge of/involvement with ELLs was at the novice, some, or expert level, 15 participants (33.3%) self-identified as “novice”; 18 (40%) identified as “some”; nine (20%) identified as “expert”, and three participants did not respond to that question. Since the vast majority of participants were current or pre-service educators (95%) with a range of self-categorized levels of expertise regarding educating ELLs and the participants in the principal action research study would also be educators with diverse experiences and levels of expertise, the researcher determined that the results of the pilot study surveys would be useful, along with the literature review, in providing the groundwork for the action research study. In addition to providing preliminary data, an important aspect of the pilot study was to ensure that the survey items accurately addressed the research questions in the action research study, and whether the questions were comprehensible and appropriate.

The researcher typed the responses of the open-ended questions into an Excel sheet in order to sort and code for themes. Through the sorting by similarities and coding process, several themes emerged. The three themes that had the most examples are narrated for each open-ended question, followed by a table summarizing those results. The first question was: what challenges do you believe we face in regard to educating ELLs? The three themes that emerged and generated the most examples for that questions were: (1) teaching English while maintaining students’ first/home language (L1), (2) policy changes that are not justified by

research/student need, and (3) lack of resources, including knowledgeable/EL certified teachers.

In theme one, participants referred to the struggle inherent in the need to help students learn English – as it is the language required for academic success and performing well on standardized measures – while understanding the value of culturally and linguistically diverse students’ L1. For example, one participant stated that, “We face the challenge of educating students on how to use proper English without making them feel like they have to abandon their native language and culture.”

Responses that supported the emergence of the first question’s second theme – policy changes that are not justified by research/student need – emphasized ways in which participants perceived that state (CT) and national policies regarding the education of ELLs are based in dogmata and are not aligned with what the research tells us is good practice. One articulate example from a participant delineated that, “The most challenging issue, in my opinion, is the fear of the mainstream culture of losing political power and ground. This fear translates into policies at the local school districts which become institutional-racist protocols... Example: My district choosing an English-only program over a dual language program.” Another participant said, “Lack of... strong BE (bilingual education) policies. Current political racist climate.” And someone else expressed, “Too many beliefs out there and practices keep changing with the wind. The current practice - complete and total mainstreaming & pushing ESOL doesn't meet their (ELL students’) needs.”

The third theme that arose from the first question was lack of resources, including knowledgeable/EL certified teachers. The responses that spoke to resources, including human resources, lacking in classrooms, schools, or districts helped to support this theme. Some relevant examples of participant response that corroborate the theme include, “Not enough

resources or help.” Also, “Limited resources, educators who don't understand EL's needs.” In addition, one teacher-participant responded with a list that included, “Resources: -Teachers – Materials –Time.”

The second open-ended question asked participants, “What opportunities do you believe we face in regard to educating ELLs?” The three themes with the most participant examples were: (1) dual language programs/shifting paradigm from deficit models, (2) cultural diversity/ awareness, and (3) networks of aware educators and leaders. Theme one emerged from participant statements expressing their advocacy for programming that is more inclusive of CLD students’ home language (L1) and values additive bilingualism rather than subtractive models that promote the learning of English while devaluing the L1. An example of this sentiment was, “Teaching all to value language skills. Dual Language Ed for all.” Another participant noted, “Some just believe in the traditional 30-month transitional program which in my opinion does not help our students long-term.” Further formulated was, “An opportunity to honor, value, & grow the native language of students as well as cultivate global citizens who can earn the seal of biliteracy.”

The second theme for question two was cultural diversity/ awareness, which includes statements that purport that districts have the opportunity to improve students’ educational experiences through cultivating cultural awareness and appreciating the diversity that CLD students bring to schools and districts. For example, a participant conveyed, “Cultural diversity in classrooms, cultural diversity in society, and expansion of intercultural awareness.” Others thought similarly, including, “We (teachers) can learn more about them (students) and their culture” and “Some school districts have incredible diversity, and view it as a strength of the district.”

The third theme with the most examples for question two was “networks of aware educators and leaders”. Statements that were categorized under this theme were encouraging of taking advantage of the momentum in opportunities such as the bilingual conference that served as the site of the pilot study to build networks of advocacy that could lead to change. A participant assertion that aligned with this theme was, “Growing number of educators/ administrators recognizing imperative of bilingual education.” Another noted, “The opportunity to organize and network. Promote and advocate to ensure that ELs get the education they need and deserve.”

Questions one and two sought to gauge participant perceptions, while question three asked, “What do you hope to get out of today's conference?” That question was intended to be paralleled with current research to help the researcher begin a draft of content for the professional development action research study iterations. The three most sustained themes that emerged from the inquiry were: (1) research, best practices, and strategies; (2) multiple perspectives/networking; and (3) bilingualism/ multilingualism/ biliteracy opportunities. Theme one, research, best practices, and strategies was characterized by statements indicating that participants were interested in concrete teaching methods. Notably, one participant asked for, “Best practices and research for helping ELs in the classroom because I coach teachers.” Someone else, articulated, “I hope to learn more strategies for working with ELL students while maintaining their home languages.”

The second theme, multiple perspectives/networking, included numerous statements indicating that those participants attended the conference hoping to learn from others as well as make connections with like-minded professionals. One participant specified that they hoped to, “Meet additional advocates with energy.” In a collaborative spirit, someone expressed, “I hope

to hear the ideas people have to expand ELL opportunities in our state.” The last theme for question three was bilingualism/ multilingualism/ biliteracy opportunities. There were statements expressing participants’ interest in learning about and participating in opportunities that enhanced students’ ability to speak and/or read and write in multiple languages. One such example outlined, “More knowledge about how to introduce, encourage, and how to teach bilingualism.” Table 2 abbreviates the top three themes for each question.

Table 2 Pre-conference Survey Open-ended Themes

Question	Theme 1	Theme 2	Theme 3
<i>1. What challenges do you believe we face in regard to educating ELLs?</i>	Teaching English while maintaining students’ first/home language (L1)	Policy changes that are not justified by research/student needs	Lack of resources, including knowledgeable/EL certified teachers
<i>2. What opportunities do you believe we face in regard to educating ELLs?</i>	Dual language programs/shifting paradigm from deficit models	Cultural diversity/ awareness	Networks of aware educators and leaders
<i>3. What do you hope to get out of today's conference?</i>	Research, best practices, strategies	Multiple perspectives/networking	Bilingualism/multilingualism/ biliteracy opportunities

The last 5 questions were formulated as statements focused on bilingualism, English development, programming at the district and state level, and participants’ confidence in regard to advocacy. The statements were closed-ended, with the intention of ensuring that participants chose a response, and attempted to gauge participant perspectives. The number of participant responses for each question and answer are illustrated below in table 3.

Table 3 Pre-conference Perspective Results

Question	Yes	Somewhat	No	Don't Know
<i>Bilingualism and biliteracy are beneficial to all students.</i>	42 (93.3%)	3 (6.7%)		
<i>The most important purpose of bilingual education/ELL supports is to help students learn English.</i>	11 (24.4%)	20 (44.4%)	14 (31.1%)	
<i>School districts in my state are meeting the needs of English language learners.</i>	3 (6.7%)	21 (46.6%)	14 (31.1%)	7 (15.6%)
<i>There are sufficient dual language programs in my state.</i>	1 (2.2%)	7 (15.6%)	21 (46.7%)	16 (35.6%)
<i>I know how to advocate on behalf of English language learners.</i>	14 (31.1%)	18 (40%)	5 (11.1%)	8 (17.7%)

Post-conference Survey

Seventeen conference attendees who stayed until the end of the breakout sessions, voluntarily completed and turned in the post-conference survey. Of those who completed and returned the survey (n=17), three (17.6 %) identified as college students or pre-service teachers; eight (47%) noted they are teachers; three (17.6 %) serve in a leadership role as building/district administrators or coaches; one (5.9%) as a consultant; and two did not identify their roles. As in the pre-conference survey, all (n=17) of the participants live/work in Connecticut. When asked to choose what best describes their knowledge of/involvement with ELLs, one participant (5.9%) chose “novice”, 10 participants (58.8%) chose “some”, and five participants (29.4%) chose “expert”, while one left this field blank. For this version of the survey, there were two open ended questions. Responses were coded for themes, and summarized in the paragraphs that follow.

Question one asked, “What are you taking away from today's conference?” The three emergent themes that yielded the most examples were: (1) resources/ideas, (2) importance of biliteracy/multilingualism/dual language, and (3) ideology- integration vs. assimilation. An

example of a participant response categorized under the resources/ideas theme was, “I’m taking away great resources that validate what I know is good practice.” Theme two, importance of biliteracy/multilingualism/dual language, was generated from numerous relevant responses indicating that participants gained perspective or strengthened their stances in support of programs and strategies that lead to bilingualism. Some associated participant statements included, “The imperative of dual language/culturally responsive programs which value both languages” and “Better understanding of how to support literacy in my bilingual students.” The third theme, ideology – integration vs. assimilation, stemmed from responses that specified participants’ new understanding and perspective on the ideologies that guide policy and practice. One teacher-participant specified, “Ideology - people need to change their view on bi/multilingualism. Instead of pushing for assimilation, we should be integrating students’ language and culture into schools.” Another declared, “That I am correct in my ideology and research of the power of bilingualism and biliteracy in the academic success of English learners.”

The second open-ended question probed, “Do you have any unanswered questions? If yes, specify.” Three prominent themes emerged including: (1) specific work/techniques targeting teachers/non-EL teachers, (2) how to change broader perspectives/ideology, and (3) more on students with non-Roman alphabets. An example of a response supporting the theme of specific work/techniques targeting teachers/non-EL teachers was, “How can we push non-ESL teachers to be qualified to work with ELs?” Theme two, how to change broader perspectives/ideology, was comprised of questions such as, “How can we begin the change of perception and of ideologies of the people that make policy?” The third theme, more on students with non-Roman alphabets, arose from questions concerning supporting students whose L1 may be a low incidence language. One statement was, “I’d like to know more about biliteracy for

students whose home languages use non-roman alphabets.” While another participant asked, “What does CT or educational authorities do for students speaking a second language other than Spanish?” Table 4 below summarizes the three most notable themes for each question.

Table 4: Post-conference Themes

Question	Theme 1	Theme 2	Theme 3
<i>1. What are you taking away from today's conference?</i>	Resources/ideas	Importance of biliteracy/ multilingualism/ dual language	Ideology- Integration vs. assimilation
<i>2. Do you have any unanswered questions? If yes, specify.</i>	Specific work/ techniques targeting teachers/ non-EL teachers	How to change broader perspectives/ ideology	More on students with non-Roman alphabets

The last five questions were closed-ended. Participant responses are indicated below (table 5). Numbers in each column represent the number of participants that checked off that option and the corresponding percentages based on n=17.

Table 5: Closed-ended Post Conference Participant Perceptions

Question	Yes	Somewhat	No	Don't Know
<i>Bilingualism and biliteracy are beneficial to all students.</i>	17 (100%)			
<i>The most important purpose of bilingual education/ELL supports is to help students learn English.</i>	4 (23.5%)	4 (23.5%)	9 (52.9%)	
<i>School districts in my state are meeting the needs of English language learners.</i>		6 (35.3%)	10 (58.8%)	1 (5.9%)
<i>There are sufficient dual language programs in my state.</i>		2 (11.8%)	14 (82.4%)	1 (5.9%)
<i>I know how to advocate on behalf of English language learners.</i>	9 (52.9%)	7 (41.2%)	1 (5.9%)	

Analysis and Conclusions

The participant responses can lend insight to the planning and development of professional development. Both the open-ended and closed-ended questions generated dissectible results. In both surveys, participants showed that they valued multi-lingualism, biliteracy, and supporting students' first or home language (L1) in addition to helping students attain English and content proficiency. Additionally, the majority of participants did not perceive school districts in the state of Connecticut as currently meeting the needs of ELLs, supporting the need for this research study that sought to help mainstream teachers meet the needs of culturally and linguistically diverse populations. Participants, who represented various constituencies, mentioned an interest in research-based strategies and the need for teachers- including non- EL teachers- to become more knowledgeable of how to teach ELLs. The researcher used these data to adapt the survey and as a compliment to the literature review to inform the creation of professional development content for this research study.

Research Study Results

The data in this research study lend insight to the overarching research question:

1. Did professional development for mainstream teachers of culturally and linguistically diverse students have an impact on teachers' (a) Lesson Preparation, (b) Building Background, (c) Comprehensible Input, (d) Interaction, and (e) Practice of Elements for culturally responsive classrooms? and the additional questions listed below.

Quantitative Hypothesis:

2. Professional development training for teachers improves their ability to implement sheltered instruction strategies and empirically-based elements of culturally responsive classrooms that are beneficial to culturally and linguistically diverse students.

Qualitative Research Questions:

3. What do teacher participants think about the applicability of professional development with strategies to support culturally and linguistically diverse students?
4. What is the teacher participants' comfort level with teaching culturally and linguistically diverse students after receiving professional development (PD) on the topic?

As this was an action research study, the data for each iteration are presented sequentially. The first iteration and its various components are presented first. The pre and post intervention survey data are presented in tables and supported by a narrative description of the results. The transcripts of the participant interviews were initially coded for themes, followed by line-by-line in-depth coding to solidify and reduce the number of themes that were then categorized. The prominent themes and their corresponding categories generated from the data were tabulated and are accompanied by a narrative description of the results. Pre and post observation data were also organized into tables, accompanied by a description of the results and t-tests that were performed on the data sets to compare the pre and post observation application of sheltered instruction strategies and elements of culturally responsive classrooms.

First Iteration Surveys

During the first iteration of the action research study, participant surveys (see Appendix A) were completed by nine teachers prior to the professional development (Pre-PD) intervention and five participants after the PD (Post-PD). The surveys contained questions that provide both quantitative and qualitative data. The data were analyzed with the results for each one explained successively.

Pre-PD Survey

Nine teacher participants (n=9) voluntarily completed the pre-professional development (PD) survey. Eight (88.89%) responded that their knowledge of/involvement with English language learners (ELLs) was “some”, while only one (11.11%) chose “novice”. All nine participants (100% of n=9) responded “yes” to having ELLs in their classrooms. The question, “Do you have students from non-dominant cultures or who are heritage speakers of another language (not necessarily ELL) in your classroom?” yielded three (33.33%) responses of “I don’t know” and six (66.66%) “yes” responses. Although no teachers considered themselves experts in their knowledge or involvement with ELLs, all participants were teachers of ELLs in their mainstream classrooms, and most were aware of students from non-dominant cultures in their classrooms.

Additionally, the survey contained three open-ended questions. The questions and the participant responses to each are summarized in table 6 (see Appendix H). An X indicates no response was given for that particular question. Participants shared perceived challenges of lacking tools, not speaking another language (Spanish in particular), teaching reading comprehension and math concepts that require language, lacking knowledge of strategies for students’ language proficiencies, communicating with families that don’t speak English, sounds in English that are not found in students’ home language, students processing academic language, cultural differences in a social context, and the impact of assessments and standards on ELLs. One person did not understand the meaning of the question, “What opportunities do you believe we have in regard to educating English language learners?” Another participant responded, “I don’t know”, and one left that question blank. The other six participants provided responses indicating that we have opportunities to work with various stakeholders to learn and

use effective strategies for working with ELLs, for teachers and other students to learn about another language and culture, to utilize the resources already available at the school for the purpose of teaching language, working with students that are eager to learn, using students' unique prior knowledge to add to classroom conversations, and incentive to include work with texts that reference more cultures.

The last six questions were closed-ended, rating scale questions. The options were “yes”, “somewhat”, “no”, and “I don’t know”. The questions and corresponding participant responses are summarized in table 7 below, followed by a narrative description of the results.

Table 7 Pre-PD Closed-ended Responses

<i>Participant</i>	Bilingualism and biliteracy are beneficial to all students.	The most important purpose of bilingual education/ELL supports is to help students learn English.	Our school is meeting the needs of English language learners.	I know how to advocate on behalf of English language learners.	My classroom environment is culturally inclusive.	I deliver culturally responsive instruction in my classroom.
#1	Yes	I don't know	I don't know	Somewhat	Yes	Somewhat
#2	Yes	Somewhat	Somewhat	Somewhat	Somewhat	Somewhat
#3	Yes	Somewhat	I don't know	Somewhat	Somewhat	I don't know
#4	Yes	No	Somewhat	No	Somewhat	Somewhat
#5	Somewhat	Yes	Somewhat	Somewhat	I don't know	I don't know
#6	Yes	Yes	I don't know	Somewhat	Yes	Yes
#7	Yes	Somewhat	Somewhat	Yes	Somewhat	Somewhat
#8	Yes	Somewhat	Somewhat	Somewhat	Somewhat	Somewhat
#9	Somewhat	Yes	Somewhat	Somewhat	Somewhat	Somewhat

Participants agreed that bilingualism and biliteracy are beneficial to students with seven (77.78%) responding “yes” and two (22.22%) indicating “somewhat” in response to the statement, “Bilingualism and biliteracy are beneficial to all students.” In response to, “The most important purpose of bilingual education/ELL supports is to help students learn English,” one participant (11.11%) checked “no”; four (44.44%) checked “somewhat”; three (33.33%) “yes”, and one (11.11%) “I don’t know”. This is evidence that most participants have a moderate awareness that the purpose of bilingual education goes beyond helping students learn English. The next statement, “Our school is meeting the needs of English language learners”, produced six (66.67%) responses of “somewhat” and three (33.33%) “I don’t know” choices. This could suggest that either not all of the needs of ELLs are being met, or that mainstream teachers are not aware of the efforts or programming details that the school has in place.

Seven (77.78%) participants noted that they “somewhat” knew how to advocate on behalf of ELLs; while one (11.11%) said “yes” and another one (11.11%) said “no”. Two (22.22%) participants indicated “yes” to the statement, “My classroom environment is culturally inclusive”; while six (66.67%) said “somewhat” and one (11.11%) “I don’t know”. In response to, “I deliver culturally responsive instruction in my classroom”, six (66.67%) participants “somewhat” one (11.11%) “yes” and two (22.22%) “I don’t know”. These data suggest that participants needed more information and/or support in order to feel more confident advocating for ELLs as well as creating culturally inclusive classrooms and delivering culturally responsive instruction. The data were useful in preparing and delivering the content of the first iteration PD intervention as well as reaffirming the need for the intervention at the research site. It was also useful to the cyclical nature of action research as the researcher was able to implement the intervention, consider the impact on participants, and adjust as needed for the two iterations that

followed. This gave the researcher the confidence to develop and present a refined third iteration that could be used to address similar needs in other district schools.

Post-PD Survey

Five teacher participants (n=5) voluntarily completed the post-professional development (PD) survey after the first iteration. Four (80%) responded that their knowledge of/involvement with English language learners (ELLs) was “some”, while one (20%) chose “novice”. The question, “Do you have any unanswered questions?” yielded two (40%) responses of “no” and three (60%) “yes” responses. The question asked participants to expand on their response if they did have unanswered questions, which resulted in the responses illustrated in table 8 below as well as in the paragraphs that follow. Additionally noted are the responses to the survey’s other open-ended question, “What are you taking away from today's PD?”

Table 8 Post-PD Open-ended Responses

	What are you taking away from today's PD?	Do you have any unanswered questions?
<i>Participant #1</i>	Looking at the scaffolding options for LVL 1, I feel like I am familiar with the sections that would work best for my students. It did give me some ideas of what I can do - but it was not tailored completely to my needs working with primary.	I did discuss with you somewhat, but I look forward to hearing more regarding primary.
<i>Participant #2</i>	The strategies chart that is aligned with the LAS Links scores	I would like more specific information about the differences between different kids I service.
<i>Participant #3</i>	How I can plan lessons with language objectives in mind and how I can observe and assess where some of my EL kids are along a spectrum of language understanding and expression	No
<i>Participant #4</i>	1. There are EL standards (CELP) that are aligned with other common core standards. 2. The specifics and purpose of LAS Links testing. 3. How and why the Integration approach (and other models) works. 4. I learned a lot!	When is the next module?
<i>Participant #5</i>	To be more intentional and aware of students within the classroom.	No

Participants shared that they took away specific strategies, understanding various levels of language learning, the purpose and format for testing ELLs' language acquisition (LAS Links) and how classroom content and skills align with the EL standards and assessment, and an understanding of having intention behind classroom activities. One person noted that the content of the PD was helpful, but not as relevant to them as it did not specifically address the needs at the grade level taught by that participant – Primary. Due to the PD schedule format, this participant attended the first iteration which gave a general overview of language acquisition, but

focused on strategies specific to upper elementary (grades 4-6). That feedback was helpful as it solidified the importance of providing relevant and grade-level specific strategies for teachers to apply after attending the PD.

As in the Pre-PD survey, the last six questions were closed-ended, rating scale questions. The options were “yes”, “somewhat”, “no”, and “I don’t know”. The questions and corresponding participant responses are summarized in table 9 as well as summarized in the subsequent paragraphs. Note that the last two statements were adjusted from the Pre-PD survey which said, “My classroom environment is culturally inclusive” and “I deliver culturally responsive instruction in my classroom” to statements about the participants’ intention to provide a culturally inclusive environment and delivering culturally responsive instruction. This helped the researcher determine if participants intended to change their practice after attending the PD intervention.

Table 9 Post-PD Closed-ended Responses

<i>Participant</i>	Bilingualism and biliteracy are beneficial to all students.	The most important purpose of bilingual education/ELL supports is to help students learn English.	Our school is meeting the needs of English language learners.	I know how to advocate on behalf of English language learners.	I plan to make changes in my practice in order to ensure that my classroom environment is culturally inclusive.	I plan to make changes in my practice in order to deliver culturally responsive instruction in my classroom.
#1	Yes	No	Somewhat	Somewhat	Somewhat	Yes
#2	Yes	Somewhat	Somewhat	Yes	Yes	Yes
#3	Yes	Somewhat	Somewhat	Somewhat	Yes	Yes
#4	Yes	Somewhat	Yes	Yes	Yes	Yes
#5	Yes	Somewhat	Somewhat	Somewhat	Yes	Yes

After the PD, all (100%) of participants agreed that bilingualism and biliteracy are beneficial to students. In response to, “The most important purpose of bilingual education/ELL supports is to help students learn English,” one participant (20%) checked “no”; and four (80%) checked “somewhat”. Unlike the Pre-PD survey, no one indicated “yes” nor “I don’t know”. The next statement, “Our school is meeting the needs of English language learners”, produced four (80%) responses of “somewhat” and one (20%) said “yes”. This time, no one chose “I don’t know”. This could suggest that after the PD, mainstream teachers became more aware of the programming offered to ELLs or the strategies they were already employing without being conscious that they benefit culturally and linguistically diverse students.

Three (60%) participants noted that they “somewhat” knew how to advocate on behalf of ELLs; while two (40%) said “yes”. No participants indicated “no” on that statement after PD. Four (80%) participants indicated “yes” to the statement, “I plan to make changes in my practice in order to ensure that my classroom environment is culturally inclusive.”; while one (20%) said “somewhat”. In response to, “I plan to make changes in my practice in order to deliver culturally responsive instruction in my classroom”, all (100%) of the participants indicated “yes”.

These survey responses were analyzed and taken into consideration with other data sources in order to answer the research questions:

3. What do teacher participants think about the applicability of professional development with strategies to support culturally and linguistically diverse students?
4. What is the teacher participants’ comfort level with teaching culturally and linguistically diverse students after receiving professional development (PD) on the topic?

In order to determine if the PD session influenced participants’ thoughts and comfort level, a two proportion z-test was used to determine if difference in proportions from the pre-PD survey and the post-PD survey were statistically significant. The two proportion z-test indicates for which questions, if any, the PD raises the proportion of “yes” answers at a 95% confidence interval for the true population and alpha level of 0.05. For the second statement – “The most important purpose of bilingual education/ELL supports is to help students learn English” - it would be possible that based on the PD emphasizing that learning content and academic language are imperative to ELL and CLD students’ success, the proportion of “no” responses could increase. Another two proportion z-test was used to determine if that was the case. Results determined that the PD helped increase the proportion of “yes” answers in questions 5 and 6 - “I plan to make changes in my practice in order to ensure that my classroom environment

is culturally inclusive” and “I plan to make changes in my practice in order to deliver culturally responsive instruction in my classroom”. However, there was no statistically significant indication that the proportion of “no” responses increased for the second statement. Table 10 quantifies up the results.

Table 10 Pre vs. Post PD 1 Changes in Perception that Influence Change

		PERCENT THAT SAID YES					
		Bilingualism and biliteracy are beneficial to all students.	The most important purpose of bilingual education/ELL supports is to help students learn English.	Our school is meeting the needs of English language learners.	I know how to advocate on behalf of English language learners.	Pre: My classroom environment is culturally inclusive. Post: I plan to make changes in my practice in order to ensure that my classroom environment is culturally inclusive.	Pre: I deliver culturally responsive instruction in my classroom. Post: I plan to make changes in my practice in order to deliver culturally responsive instruction in my classroom.
N = 9	<i>PRE</i>	77.7%	33.3%	0.0%	11.1%	22.2%	11.1%
N = 5	<i>POST</i>	100.0%	0.0%	20.0%	40.0%	80.0%	100.0%
		95% Confidence Interval for the true population proportion to say Yes					
	<i>Pre</i>	50.6% - 100.0%	2.5% - 64.1%	0.0% - 0.0%	0.0% - 31.6%	0.0% - 49.3%	0.0% - 31.6%
	<i>Post</i>	100% - 100%	0.0% - 0.0%	0.0% - 55.1%	0.0% - 82.9%	44.9% - 100%	100% - 100%
		2 Proportion z-test to determine if difference in proportions are statistically significant (PD has raises the proportion of Yes answers)					
	<i>p value</i>	0.1274	0.0726*	0.0819	0.1034	0.0181	0.0006
	Statistically significant @ alpha level of 0.05	NO	NO	NO	NO	YES	YES
	*Proportion of NO	RESULTS:		PD helps increase proportion of yes answers in questions 5 and 6.			

These results help inform the answers to the qualitative research questions:

2. What do teacher participants think about the applicability of professional development with strategies to support culturally and linguistically diverse students?
3. What is the teacher participants' comfort level with teaching culturally and linguistically diverse students after receiving professional development (PD) on the topic?

Questions five and six were framed differently in the pre- and post-PD surveys in order for the researcher to first gain insight on participants' perceptions of their classroom environment and level of culturally relevant instruction, and then determine if participants intended to apply culturally responsive instruction strategies that support CLD students and culturally responsive environments. To that end, the statements in survey questions five and six first read (5) My classroom environment is culturally inclusive and (6) I deliver culturally responsive instruction in my classroom. In the post-PD survey they read (5) I plan to make changes in my practice in order to ensure that my classroom environment is culturally inclusive and (6) I plan to make changes in my practice in order to deliver culturally responsive instruction in my classroom.

First Iteration Interviews

Participants' transcripts were reviewed line by line, with possible categories and themes created based on the coding result (Saldaña, 2013; Charmaz, 2014; Norton, 2009). Index cards were created with the initial themes, and responses based on similar content were reviewed and organized a second time to seek collective responses and uncover any new information (Saldaña, 2013). After initial coding, the researcher followed six stages of analysis, including: (a) generating categories- closer reading, one by one, looking to generate as many categories as possible and to write down a label that best describes each category; (b) deleting categories- delete categories that only have one or two examples (unless well-supported in other research),

or that significantly overlap with others; (c) merging categories- collapse as many categories as possible and relabel them as themes; (d) checking themes- reread transcripts alongside the list of themes to check for accuracy and revise if necessary; (e) linking themes- analyze the data taking caution not to simply paraphrase the data, making notes of any relationships or links the researcher sees between themes; and (f) presenting the findings (Norton, 2009).

Initial coding revealed 26 emergent themes (see table 13 in Appendix K), and similar groupings were created based on shared characteristics. Following a thematic analysis, an additional round of coding was utilized to identify similar concepts and themes among the data, resulting in a further refinement of codes into themes (Norton, 2009; Saldaña, 2013). Further data reduction and code combination led to clearer conceptual integration. During second-cycle coding, codes were further refined, re-themed, and regrouped in an effort to move to deeper data description, classification and interpretation. The 26 original themes were reduced to 15, and further refinement and regrouping occurred by clustering similar segments of codes together into similar groups (see table 14). The four constructed categories were considered in relation to the research questions.

Table 14 defines the four categories used for the themes: time and frequency, workshop components, participant perceptions, and new understandings. The categories were based on the primary research question: “Did professional development for mainstream teachers of culturally and linguistically diverse students have an impact on teachers’ (a) Lesson Preparation, (b) Building Background, (c) Comprehensible Input, (d) Interaction, and (e) Practice of Elements for culturally responsive classrooms?,” and the three sub-questions: “What do teacher participants think about the applicability of professional development with strategies to support culturally and linguistically diverse students?” and “What is the teacher participants’ comfort level with

teaching culturally and linguistically diverse students after receiving professional development (PD) on the topic?” In addition, the categories took into consideration that part of the purpose of the study was for the researcher to improve her own practice.

Table 14 Definition of Thematic Categories:

Category	Definition
<i>Time and Frequency</i>	The amount of time allotted to the workshop attended by participants and the repetition of workshops on the same topic.
<i>Workshop Components</i>	The specific pieces of information that the presenter included in the workshop.
<i>Participant Perceptions</i>	Feelings and observations from the perspective of participants.
<i>New Understandings</i>	What participants can articulate that they understand or know as a result of the workshop.

Table 15 lists the fifteen themes and their corresponding category. Table 16 in Appendix L links the fifteen themes with their corresponding category, and a label for each theme is accompanied by an actual participant phrase that serves as further characterization. The phrases are examples extracted directly from the participant transcripts.

Table 15 Categories and Themes:

Category	Theme
<i>Time and Frequency</i>	<i>1. Workshop Length</i>
	<i>2. Number of Workshops</i>
	<i>3. Processing/Collaboration Time</i>
<i>Workshop Components</i>	<i>4. Content/Grade Specific</i>
	<i>5. Practical Hand-outs/Resources</i>
	<i>6. Personal Feedback for Participants</i>
	<i>7. Humorous Illustrations</i>
	<i>8. Opportunities for Questions</i>
<i>Participant Perceptions</i>	<i>9. Organization/Preparation</i>
	<i>10. Relatability/Personal Connection</i>
	<i>11. Engagement</i>
<i>New Understandings</i>	<i>12. Strategies</i>
	<i>13. Heightened Awareness</i>
	<i>14. Resource Accessibility</i>
	<i>15. Vocabulary Building</i>

Narrative Description of Themes

Time and Frequency

Theme 1: Workshop Length

All of the participants mentioned the length of the professional development (PD) workshop. In these instances, the length of the workshop refers to the amount of time spent on the workshop in a single day or iteration. In all cases, participants noted that the PD session

should have been longer. In addition, some participants suggested how the time could be used. For example, one participant said, “I needed kind of a longer time to unpack some of that...” Another participant noted, “I think if she had one more (illustrative activity) it might have, maybe toward the end, added as a highlight so you walk out feeling like, ‘oh, I’ve got to do something about this’.”

Theme 2: Number of Workshops

Two of the four participants made numerous references during their interviews to the number of workshops that could be offered around this topic. Both were advocating for additional “modules”, which was interpreted as sequential PD offerings that build on each other. One participant said that, “If we could have quite a few more like that, modules over time, that would be really helpful also.” Another expressed that, ““I still have so much to learn, so at this point I’m just an empty vessel, just taking it all in. So, I would have to go through at least three more modules...”

Theme 3: Processing/Collaboration Time

All four first-iteration participants made reference to feeling like the workshop could have included additional opportunities for participants to talk with each other, to process, and to collaborate. This theme is deemed separate from theme 1, Workshop Length, because when participants referenced processing and collaboration time, they did not say it in the context of additional time, rather that within the structure of the workshop some of the allotted time could be used in this way. For example, one participant said, “I was thinking about 45 minutes in I was starting to sort of glaze over, and I thought this would be a great time for some kind of break where we actually do an activity.” Another specified, “I think some activities between, and some processing time, and some more conversation and discussion between.”

Workshop Components

Theme 4: Content/Grade Specific

Two of the interview participants made multiple mentions of the importance of the workshop content including grade and content area-specific strategies and resources. Based on the transcripts, it was apparent that they felt strongly that planning and effort was apparent in the tailored content, and that participants were more engaged and connected as a result. One of the participants was very complimentary of the details, “That would be one thing that I would say for anyone presenting. If you find something, one thing that pertains directly to your special groupings you are presenting to, you, right away have shown them that you are trying to make the effort to connect in a meaningful way with what they may need for PD.”

Theme 5: Practical Hand-outs/Resources

All of the participants mentioned that they received useful hand-outs or resources numerous times throughout the interviews. Comments varied from specificity of the helpful content in the hand-outs, such as graphic organizers, to the general practicality of having resources in print and in hand, rather than as a list projected in a presentation. Specific examples included, “The handouts were very helpful. Some of the handouts also had graphic organizers for students and that is always helpful with our students who need that extra support, even the ones that don’t” and “She gave handouts which was great, and that’s even better than someone who just puts up, ‘here, write down these links’.”

Theme 6: Personal Feedback for Participants

All of the participants remarked that it was refreshing, helpful, or positive to give participants’ specific feedback that not only included areas of improvement, but highlighted what is already going well in their classrooms. Based on the transcripts, their comments were

unprovoked by the interviewer, but rather emerged during the semi-structured interviews. Responses such as the following are indicative that feedback that includes positive observations is helpful in securing buy-in for improvement initiatives, “It was good to know what we as a school are doing right. She gave us a printout of what we’re already doing in meeting students’ needs and what she saw that we are working on and what we definitely need to work on.”

Theme 7: Humorous Illustrations

The researcher-presenter used a humorous video clip in order to have multi-media in the presentation and maintain participant engagement, as well as to illustrate the difficulties in the English language that native English speakers may take for granted. Three of the four participants noted that this component of the workshop was both funny and informative and that it made an impact on them. One of the participants articulated, “She used a recording that was cute, it was an I love Lucy...it was a recording of the TV show. The idea of using that and showing how different words and sounds and everything, it did bring things home.”

Theme 8: Opportunities for Questions

Three participants also made multiple references to their appreciation for the opportunity to ask questions. It was brought up often such as in this quote simply noting that “She gave us opportunities to ask questions.” Beyond just having the researcher-presenter ask if there were any questions, participants asked questions on their own when they felt appropriate. Evidence of rapport can be noted in comments such as, “I felt comfortable asking questions.”

Participant Perceptions

Theme 9: Organization/Preparation

All of the participant interviews mentioned observations that were combined into the theme of organization/preparation. While there were many examples, the following illustrates

the perception that the researcher-participant presented the information in an organized manner and seemed prepared for the PD workshop, “She really, I really felt like a student, she started from the bottom and built us up with the information she was giving to us. I was able to picture myself in the classroom with the kids that she’s talking about, you know what I mean? It was clear and concise in that kind of way.”

Theme 10: Relatability/Personal Connection

Another theme that emerged through all the phases of analysis, was that participants perceived the researcher-presenter as relatable and having made a personal connection with the audience. For example, someone mentioned that, “It was clear, she had some humor in it, she had personal comments that made you both aware of her connection to the subject matter and that it was important to her.” They seemed impacted by the relatability in a positive way, and one participant articulated how important that is to PD in general, “I think that personal connection did come across and I think that is very valuable in terms of anyone giving PD because if you don’t make a connection with your audience first, probably nothing else is going to work very well.”

Theme 11: Engagement

Throughout the interview transcripts, it was evident that keeping participants engaged was an important part of having them grasp the workshop content. Without prompting, there were numerous mentions of participants themselves remaining engaged and actively participating, or participants noticing that other attendees remained engaged and were seemingly paying attention throughout the workshop. One participant remarked, “It kept everyone that I was able to see interested. People maintained involvement, there wasn’t long, drawn out pauses when a question was posed by the presenter.”

New Understanding

Theme 12: Strategies

All four participants talked about either the general helpfulness of receiving strategies, or mentioned specific strategies that they were glad to receive or chose to implement after the workshop. Further, one profound understanding that emerged was the idea that the strategies should be used in the mainstream classroom as children who are ELLs or culturally and linguistically diverse (CLD) should be integrated into learning with their peers. One specific remark was that, “There was a set of strategies, a listing of strategies, that she handed out that sort of talked about how one could better interact with ELLs in terms of helping them... it was broken down in terms of listening, speaking, writing, and reading.”

Theme 13: Heightened Awareness

There was a plethora of examples from participants noting that the workshop made them have a heightened awareness of what services are provided to ELL and CLD students, how teachers can create culturally responsive environments, awareness of the linguistic challenges many students face, and an ongoing awareness that guides lesson plans and classroom activities. One participant noted, “I’m aware with more knowledge and education behind, and you know, what we do here and how we provide services to these learners. I’m just more mindful, more aware.” Another explained that, “It’s made me more aware in my lessons and my planning and being aware of the students, their culture, their background, and – obviously – you know, every child is not coming from the same starting point.”

Theme 14: Resource Accessibility

All participants alluded to finding helpful either the resources that were handed out, or information that was presented and they made notes of in order to enhance their practice. An

important part of the presentation seemed to be having hard copies of materials that supplemented or illustrated the strategies presented and that participants could easily access on their own time without having to go far or participate in an aimless online search. This participant mentioned the resources as well the accessibility who they can ask for support in the building, “Having the paperwork to go with it means if I get to a point where I go, ‘what should I do with this person?’ I have a place to start, and secondly, I’ve got a person to go and follow up with should I need to.”

Theme 15: Vocabulary Building

The importance of helping students acquire academic language through essential vocabulary came through often for at least three of the four participants. Participants discussed being conscious of both the vocabulary they themselves use while teaching, and the vocabulary that they explicitly teach students so that students can access academic content. One teacher explained their own process of taking a step back sometimes, now that they have a heightened awareness of struggles related to language rather than ability, “I noticed that one of my kids who’s an EL just reading an equation the other day, just how challenging it was for him just saying plus and equals, those are not numbers right? So I had to kind of slow him down and say, ‘you know plus, that means to add’ which is another thing that they have to figure out and then equals, what does that really mean? So, yeah, I mean vocabulary is huge at this point now...”

These interview data were used by the researcher, along with the other data points, to inform responses to the research questions. The fifteen themes that emerged and their corresponding categories provided insight into whether PD improves teachers’ ability to implement sheltered instruction strategies and empirically-based elements of culturally responsive classrooms, and the qualitative research questions:

3. What do teacher participants think about the applicability of professional development with strategies to support culturally and linguistically diverse students?
4. What is the teacher participants' comfort level with teaching culturally and linguistically diverse students after receiving professional development (PD) on the topic?

The category of Time and Frequency and its codes – Workshop Length, Number of Workshops, and Processing/Collaboration Time – implies that teacher-participants value the PD itself and are willing to participate in more of it. The other three categories, Workshop Components, Participant Perceptions, and New Understandings contained themes indicating that teacher participants found the PD applicable and felt more prepared (in turn, more comfortable) to teach CLD students after participating in the PD intervention. Key codes that supported those implications were Content/Grade Specific, Practical Hand-outs/Resources, Personal Feedback for Participants, Strategies, Heightened Awareness, Resource Accessibility, and Vocabulary Building.

First Iteration Pre- and Post-Intervention Observations

Participants were observed using the adapted SIOP protocol and culturally responsive classroom checklist adapted by the researcher (see Appendix B). The completed protocol for observations checklists were tallied for observable components used by teacher participants. Per Hendricks (2013), checklists and tally sheets are useful for recording behaviors and events and can provide useful information about differences in increased achievement between and among groups. T-tests were run after the first and second iterations on the tallied scores to determine if there were significant differences before and after the intervention. The t-tests were also run on the tallied protocol scores of all nine participants, combining the first two iterations to see if there was an overall benefit that may have resulted from the PD intervention. In addition, item

by item t-tests were run using the data from all nine participants to see if any specific observed elements had a statistically significant change after the PD interventions. The researcher acknowledges that the sample size of nine participants is small and that the further described results should be viewed cautiously. While there is no minimum sample size for the t-tests to be valid, the small sample in this study limits the statistical power of the results. However, the data can be helpful when triangulated and combined with other sources. Results of the observations and t-tests are summarized in tables and accompanied by narrative explanations.

First Iteration Pre-Intervention Observations

The adapted SIOP and Culturally Responsive Classroom Protocol (see Appendix B) contained four SIOP elements – Lesson Preparation, Building Background, Comprehensible Input, and Interaction – and their corresponding features. In addition, eleven elements of culturally responsive teaching were included in the instrument. The observable elements received scores from zero (0), when an element was not present nor observed during the observation to four (4), when an element was present and an integral part of the lesson observed. Participants could receive a maximum score of 108 points if all 27 elements had a score of 4. Participant 1 received 71 points (65.74%), participant 2 had 81 points (75.00%), participant 3 earned 70 points (64.81%), and the researcher noted 55 points (50.93%) for participant 4.

Table 11 (see Appendix I) itemizes results for the pre-observations conducted in the first iteration. The elements/components observed are numbered in the same order as they appear in the protocol. The itemized scores were analyzed by the researcher prior to the first iteration in order to adjust the PD workshop content if needed to focus on specific components. As a result, although all of the elements were discussed in the workshop, the researcher-presenter added emphasis on the process and benefits of writing language objectives (component #2) and the

benefits of students having access to native language supports (component #16). In addition, the researcher presented the results to participants by creating a sheet based on the observation protocol. The sheet was color-coded with the elements that were consistently observed among all participants in green, elements that were inconsistently observed or for which the participant scores averaged between a two or one were noted in orange, and elements with scores of two, one, or zero (either as an average or outlier) were noted in red (see Appendix F).

First Iteration Post-Intervention Observations

The same instrument was used to observe participants beginning two weeks after the PD intervention. Similarly, the observable elements received scores from zero (0), when an element was not present nor observed during the observation to four (4), when an element was present and an integral part of the lesson observed. Participants had the possibility of scoring a maximum score of 108 points if all 27 elements had a score of 4. The first participant displayed 76 points (70.37%), the second 83 points (76.85%), the third 73 points (67.59%), and the fourth 62 points (57.41%).

Table 12 (see Appendix J) itemizes results for the post-intervention observation that participants in the first iteration received. Once the first iteration pre and post-intervention observation were completed, a two sample t-test was run on the mean of the population prior to the intervention (64.12) and the mean after the intervention (68.06) to determine if post-intervention average was statistically significantly larger than pre-intervention average. The t-test determined that there was not a statistically significant increase at an alpha level of 0.05. However, the results were used by the researcher to make some adjustments in conjunction with participant feedback, to see if a more significant increase would result after the second iteration.

Second Iteration Surveys

Participant surveys (see Appendix A) were completed by seven teachers prior to the second iteration of the professional development (PD) intervention and five participants after the PD. The surveys were exactly like the first iteration, except that the fifth question was edited to say, “What opportunities do you believe we have in regard to educating English language learners? (classroom, building, district, state, or at any level you can think of).” The clarification in parentheses was added as a result of several participants in the first iteration noting that they did not understand the question. The researcher did not want to change the question itself, nor ask in a way that was leading. That was avoided by keeping the original question, and adding a clarification that was still broad enough to not be leading. The survey data were analyzed with the results for each one explained below.

Pre-PD Survey 2

Seven teacher participants (n=7) voluntarily completed the pre-professional development (PD) survey. Six (85.71%) responded that their knowledge of/involvement with English language learners (ELLs) was “some”, while only one (14.29%) chose “novice”. Five participants (71.43%) responded “yes” to having ELLs in their classrooms, and two (28.57%) responded “I don’t know”. The question, “Do you have students from non-dominant cultures or who are heritage speakers of another language (not necessarily ELL) in your classroom?” yielded three (42.86%) responses of “I don’t know”, two (28.57%) “yes” responses and two (28.57%) “no” responses. Although no teachers considered themselves experts in their knowledge or involvement with ELLs, most participants were teachers of ELLs in their mainstream classrooms. However, most were unaware of students from non-dominant cultures in their classrooms.

The survey contained three open-ended questions. The questions and the participant responses to each are summarized in Table 17 and the paragraphs that follow. An X indicates no response was given for that particular question.

Table 17 Pre-PD 2 Open-ended Responses

	What challenges do you believe we face in regard to educating English language learners?	What opportunities do you believe we have in regard to educating English language learners?	What would you like to know more about if presented with PD on addressing the needs of ELLs and/or culturally and linguistically diverse (CLD) students?
<i>Participant #1</i>	X	X	X
<i>Participant #2</i>	None	giving them equal opportunity	books to read
<i>Participant #3</i>	They can read or at least decode but many times do not understand what they read.	We do have the resources such as ELL specialists but there is always room for additional resources.	Trying to get them to understand what they read.
<i>Participant #4</i>	making sure they understand the material	even just talking about it and learning through PD	how to make sure I am helping students learn
<i>Participant #5</i>	Communicating with families to be on the same page	I think everyone is becoming more aware.	Ways to make sure I'm doing the right thing.
<i>Participant #6</i>	Students not officially receiving services until kindergarten and older	Not sure	How I can help non-readers
<i>Participant #7</i>	Too many different needs	Supportive administration	How can I help students that have vastly different needs?

Participants shared perceived challenges of reading comprehension, communicating with families, students not receiving (EL) services, and dealing with too many different needs. For the question, “What opportunities do you believe we have in regard to educating English language learners?” participants provided responses indicating that we have opportunities to provide students with an equal opportunity, we have resources in place such as an ELL specialist, the opportunity to learn through PD and discuss the topic, increased awareness, and a supportive administration. One person indicated that they were not sure, and one participant left all open-ended questions blank.

The last six questions were closed-ended, rating scale questions. The options were “yes”, “somewhat”, “no”, and “I don’t know”. The questions and corresponding participant responses are summarized in table 18 below, as described in the narrative that follows.

Table 18 Pre-PD 2 Closed-ended Responses

<i>Participant</i>	Bilingualism and biliteracy are beneficial to all students.	The most important purpose of bilingual education/EL L supports is to help students learn English.	Our school is meeting the needs of English language learners.	I know how to advocate on behalf of English language learners.	My classroom environment is culturally inclusive.	I deliver culturally responsive instruction in my classroom.
#1	Yes	No	Somewhat	Somewhat	Yes	Yes
#2	Yes	No	I don't know	No	Somewhat	Yes
#3	Yes	Yes	Yes	Yes	Yes	Yes
#4	Somewhat	Yes	Somewhat	Somewhat	Yes	Somewhat
#5	Somewhat	Somewhat	Somewhat	Somewhat	Somewhat	Somewhat
#6	Somewhat	Yes	Somewhat	Somewhat	Yes	Somewhat
#7	Somewhat	Yes	Somewhat	Somewhat	I don't know	I don't know

Three participants (42.86%) agreed that bilingualism and biliteracy are beneficial to students and four (57.14%) responded that that was “somewhat” the case. In response to, “The most important purpose of bilingual education/ELL supports is to help students learn English,” one participant (14.29%) checked “somewhat”; two (28.57%) checked “no”; and four (57.14%) “yes”. This is evidence that most participants were not aware that the purpose of bilingual education goes beyond helping students learn English. The next statement, “Our school is meeting the needs of English language learners”, produced five (71.43%) responses of “somewhat”, one (14.29%) response of “yes”, and one (14.29%) “I don’t know”.

Five (71.43%) participants noted that they “somewhat” knew how to advocate on behalf of ELLs; while one (14.29%) said “yes” and another one (14.29%) said “no”. Four (51.14%) participants indicated “yes” to the statement, “My classroom environment is culturally inclusive”; while two (28.57%) said “somewhat” and one (14.29%) “I don’t know”. In response to, “I deliver culturally responsive instruction in my classroom”, three (42.86%) participants said “somewhat”, three (42.86%) said “yes” and one (14.29%) “I don’t know”

Post-PD Survey 2

Five teacher participants (n=5) voluntarily completed the post-professional development (PD) survey after the second iteration. All five (100%) responded that their knowledge of/involvement with English language learners (ELLs) was “some”. The question, “Do you have any unanswered questions?” yielded four (80%) responses of “no” and one (20%) “yes” responses. The question asked participants to expand on their response if they did have unanswered questions, which resulted in the participant asking, “When is our next session?” This was evidence that the PD was well-received and met with enthusiasm.

As in the first iteration, the survey contained the open-ended question, “What are you taking away from today's PD?” Participants shared that they learned the developmental stages of ELLs and ways to improve supporting them in the classroom; resources- lots of things one can use right away; one participant said, “A lot. Greater understanding about ELL needs and how I can help them.”; a better understanding of how to plan for different types of learners and with language and culture in mind, and that English is not easy and students have to be taught academic language in a purposeful way.

As in the Post-PD survey, the last six questions were closed-ended, rating scale questions. After this iteration, two (40%) of participants agreed that bilingualism and biliteracy are beneficial to students, and three (60%) said it somewhat is. In response to, “The most important purpose of bilingual education/ELL supports is to help students learn English,” three participants (60%) checked “no”; and two (20%) checked “somewhat”. The next statement, “Our school is meeting the needs of English language learners”, produced five (100%) responses of “somewhat”.

Four (80%) participants noted that they “somewhat” knew how to advocate on behalf of ELLs; while one (20%) said “yes”. Three (60%) participants indicated “yes” to the statement, “I plan to make changes in my practice in order to ensure that my classroom environment is culturally inclusive”; while two (40%) said “somewhat”. In response to, “I plan to make changes in my practice in order to deliver culturally responsive instruction in my classroom”, the five (100%) the participants indicated “yes”.

In order to determine if the second iteration PD session influenced participants’ thoughts and comfort level (per the research questions), a two proportion z-test was used to determine if difference in proportions from the pre-PD survey and the post-PD survey are statistically

significant. The two proportion z-test indicates for which questions, if any, the PD raises the proportion of “yes” answers at a 95% confidence interval for the true population and alpha level of 0.05. The exception was again the second statement – “The most important purpose of bilingual education/ELL supports is to help students learn English” – for which the proportion of “no” responses was expected to increase. Another two proportion z-test was used to determine if for that question. In this iteration, results determined that the PD helped increase the proportion of “yes” answers in question 6 - “I plan to make changes in my practice in order to deliver culturally responsive instruction in my classroom”. In addition, the z-test determined that the proportion of “no” responses did increase for the second statement. Table 19 summarizes these results.

Table 19 Pre vs. Post PD 2 Changes in Perception

		Bilingualism and biliteracy are beneficial to all students.	The most important purpose of bilingual education/ELL supports is to help students learn English.	Our school is meeting the needs of English language learners.	I know how to advocate on behalf of English language learners.	Pre: My classroom environment is culturally inclusive. Post: I plan to make changes in my practice in order to ensure that my classroom environment is culturally inclusive.	Pre: I deliver culturally responsive instruction in my classroom. Post: I plan to make changes in my practice in order to deliver culturally responsive instruction in my classroom.
N = 7	<i>PRE</i>	42.9%	57.1%	14.3%	14.3%	57.1%	42.9%
N = 5	<i>POST</i>	40.0%	0.0%	0.0%	20.0%	60.0%	100.0%
		95% Confidence Interval for the true population proportion to say Yes					
	<i>Pre</i>	6.2% - 79.5%	20.5% - 93.8%	0.0% - 40.2%	0.0% - 40.2%	20.5% - 93.8%	6.2% - 79.5%
	<i>Post</i>	0.0% - 82.9%	0.0% - 0.0%	0.0% - 0.0%	0.0% - 55.1%	17.1% - 100%	100% - 100%
		2 Proportion z-test to determine if difference in proportions are statistically significant (PD has raised the proportion of Yes answers)					
	<i>p value</i>	0.5394	0.0192*	0.8113	0.3967	0.4606	0.0192
	<i>Statistically significant @ alpha level of 0.05</i>	NO	YES	NO	NO	NO	YES
	* Proportion of NO	RESULTS:		PD helps increase proportion of yes answers in question 6. PD helps increase proportion of no answers in question 2.			

Second Iteration Interviews

Exactly as in the first iteration, participants' second iteration interview transcripts were reviewed line by line, with possible categories and themes created based on the coding result

(Saldaña, 2013; Charmaz, 2014; Norton, 2009). Initial coding revealed 21 emergent themes (see Table 20 in Appendix M), and similar groupings based on shared characteristics were created. Following a thematic analysis, an additional round of coding was utilized to identify similar concepts and themes among the data, resulting in a further refinement of codes into themes (Norton, 2009; Saldaña, 2013). Further data reduction and code combination led to clearer conceptual integration, and emergent themes were organized and documented in this report (table 20, Appendix M). During second-cycle coding, codes were further refined, re-themed, and regrouped in an effort to move to deeper data description, classification and interpretation. As a result, the 21 original themes were reduced to 10, and further refinement and regrouping occurred by clustering similar segments of codes together into similar groups. Three constructed categories were considered in relation to the research questions and the study's purpose. Table 22 defines the three categories used for the themes: language, impact of presentation, and teacher learning.

Table 22 Definition of Categories 2

Category	Definition
<i>Language</i>	The way that participants think of or regard language as a result of participating in the PD workshop.
<i>Impact of Presentation</i>	How the workshop made participants feel – long and short-term impact.
<i>Teacher Learning</i>	What the teacher participants articulated taking away directly from the PD workshop.

Table 23 below lists the categories and their associated themes. Further, table 21 (see Appendix N) links the 10 themes with their corresponding category, and a label for each theme is accompanied by an actual participant phrase that serves as further characterization. The phrases are examples extracted directly from the participant transcripts.

Table 23 Categories and Themes 2

Category	Theme
<i>Language</i>	<i>1. English Difficulty</i>
	<i>2. Importance of Home Language (L1) and Culture</i>
	<i>3. Benefits of Bilingualism</i>
<i>Impact of Presentation</i>	<i>4. Presentation Delivery</i>
	<i>5. Tailored to Meet Participant Needs</i>
	<i>6. Applicability</i>
	<i>7. Relevant Feedback</i>
	<i>8. Questions Asked and Answered</i>
<i>Teacher Learning</i>	<i>9. Maximizing Resources</i>
	<i>10. Helpful Materials</i>

Narrative Description of Themes

Language Theme 1: English Difficulty

One theme that recurred throughout the five participant interviews was realization that the English language is difficult to learn for a variety of reasons. Participants made note of being more cognizant of specific sounds, as in this remark, “Some of the sounds that are in the English language, I was not aware of... there’s particular sounds that are not in Spanish. That was helpful for me as a learner.” In addition, comments within this theme cited an awareness of how the language acquisition process impacts student participation, “It has made me more aware of giving wait time also, I’m not just thinking that because the student is taking time to respond to me it isn’t because the student doesn’t necessarily know what I’m talking about, but it’s more

about a student translating or trying to find a way to make a connection so they can respond to me.”

Theme 2: Importance of Home Language (L1) and Culture

Three of the five participants mentioned home language, particularly Spanish or culture numerous times. The following expressed concern for students and families not losing their culture in exchange for assimilation, “The other thing is from a cultural perspective, I’m thinking about some of the culture of my students and their families and the concern for them for a loss of culture...” One example of participants’ understanding of the how the home language supports learning the target language (English) came through when they said, “During conferences, I will encourage EL families to read to their children even if it’s in their home language. Some have told me they didn’t read to their kids because they (parents) can’t read English, but now I can explain why it’s good for them to read in any language.”

Theme 3: Benefits of Bilingualism

This theme is different from the second in that it goes beyond understanding that the home language supports the acquisition of the target language to actually understanding the benefits of being a bilingual person. One participant thought of this benefit beyond helping ELLs access the curriculum and for expanding mainstream students’ language and culture, “For all my students, um, it’s an opportunity for them to learn another language as well.” Another derived ideas from their own bilingual background combined with strategies from the workshop, “In my classroom I speak Spanish as well, since I myself came from a bilingual home. So I used that original knowledge, coming from my own home, and I like the fact that I was able to get more strategies to work with the students (bilingually).”

Impact of Presentation Theme 4: Presentation Delivery

There was commentary by all the participants and throughout the interview transcripts regarding the presentation delivery. Of note were comments about the presentation fitting useful information into the allotted time, the presenter's level of knowledge, and being passionate about the topic. For example, "It was excellent. It was, what I felt like was often I go to a PD and the, I feel like after the end of several hours that the content of the PD could've been summarized in a half hour and I felt like the opposite for this PD." Further, "She's very dynamic. She's very calm. She was well-versed. You could tell she was passionate about this topic and about ELL children."

Theme 5: Tailored to Meet Participant Needs

In the interviews, participants expressed that they were not merely presented with general information, but that the time was maximized to address what participants needed most. One mentioned in the interview transcripts, "I thought it was really beneficial. I had actually just been saying prior to the presentation that this is one of the areas as a classroom teacher I don't know a whole lot about." Another example noted, "I thought the presentation was formatted really well and I liked that there were supplements on paper that were specific to the grade level that I teach, and that would be useful to me in my classroom."

Theme 6: Applicability

Interviewees mentioned that the content in general could be used immediately, as well as stating specific strategies or elements that could be applied in their classrooms. One example was, "I felt that the PD could be used immediately in my classroom in my classroom with students that I have that are ELL students." Another specified that, "I'm putting up the objective on the board and also wording it in multiple different ways."

Theme 7: Relevant Feedback

A recurring theme was that participants appreciated receiving relevant feedback. Interview transcripts contained numerous references to participants taking into account feedback about areas that could use improvement as well as what they already do well. One participant was able to articulate the feedback process while sharing what they took away from the workshop, “----- had the opportunity to observe in our classrooms in the building and, in a very concise way, she showed us in a color-coded format what she observed in our classrooms in regard to the sheltered instruction and culturally responsive classrooms. In terms of lesson preparation, building background...”

Theme 8: Questions Asked and Answered

While the PD workshop was designed to be very informative, it was also designed to be a conversation. Participants were presented with background information, demographics, and strategies, but they were also encouraged to ask questions and to share thoughts. Examples of participants being impacted by that format included, “I felt like we had a lot of information, but we went through it very succinctly and the participants were able to ask questions and offer feedback.” Also, “What she presented, the questions that I had, she answered them and not necessarily because I asked those questions.”

Teacher Learning Theme 9: Maximizing Resources

At least three of the five interview participants noted at different stages of the interview that as a result of the workshop they are maximizing the resources available to them, both in terms of materials, and collaborating with other staff. One teacher participant’s account of using already existing classroom content and collaborating with the English language teacher concisely captures the sentiment, “I have a couple of students in my classroom who are receiving less language support and when the EL teacher would ask what they can be working on and I wasn’t

really sure how to answer that, but now I can see how I can better support that in the classroom through the content they're already learning and it doesn't have to be something totally separate."

Theme 10: Helpful Materials

All of the participants noted that anything they received at the workshop was useful and helpful. That includes the information from the presentation, hand-outs, and a set of multicultural crayons (crayons that come in shades that resemble a spectrum of skin tones) that the researcher-presenter provided to all participants that teach grades Pre-K to third. One example is, "I took notes that I can go back to as well as walking away with hand-outs after to refer back to. And I have been able to use them in my classroom." Another descriptive quote from the transcripts was, "I absolutely loved that at the end of the presentation, each of us were able to walk away with a box of multicultural crayons and I absolutely loved that... I actually was able to use those in my classroom right away."

Second Iteration Pre and Post-Intervention Observations

With the second iteration pre and post-intervention observations complete, a two sample t-test was run on the mean of the population ($n=5$) prior to the intervention (62.04) and the mean after the intervention (65.72) to determine if post-intervention average was statistically significantly larger than pre-intervention average. Similarly to the first iteration, the t-test determined that there was not a statistically significant increase at an alpha level of 0.05. One of the limitations to using t-tests on a such a small population, is that the means would have to have a much larger difference to yield significant results – the larger the population, the lesser the difference that may be deemed significant.

Iteration 1 and 2 Observations - Aggregate Results by Element

The data from the first and second iterations were further analyzed. A two sample t-test was conducted with a significance level of 0.05 and confidence level of 95% to determine if the post-intervention average was statistically significantly larger than pre-intervention average for participants in groups 1 and 2 combined (n=9). The t-test determined that the difference was not statistically significant.

The researcher sought to answer the overarching research question, “Did professional development for mainstream teachers of culturally and linguistically diverse students have an impact on teachers’ (a) Lesson Preparation, (b) Building Background, (c) Comprehensible Input, (d) Interaction, and (e) Practice of Elements for culturally responsive classrooms?” Thus, a two sample t-test for means was also conducted for each of the 27 elements from the observation protocol. By comparing the means of the observation protocol elements from before the intervention and the means of the observation protocol elements from after the intervention, the researcher was able to determine if the post-intervention results were statistically significantly higher than the pre-intervention observations at an alpha level of .05. The t-tests revealed that elements 2, 7, and 21 (see table 24) were statistically significantly higher according to the post-intervention observations. The second element: Language objectives clearly defined, displayed, and reviewed with students, increased from a mean of 0.11 to 1.78 (elements were measured on a scale of 0 to 4). The seventh element: Concepts explicitly linked to students' background experiences, increased from 1.89 to 2.67. Lastly, the 21st element: Instruction is scaffolded to promote CLD student learning, increased from a mean of 2.33 to 2.78. Thus, the results are affirmative for specific parts of the overarching research question [(a) Lesson Preparation, (b) Building Background, and (e) Practice of Elements for culturally responsive classrooms] and the quantitative hypothesis, “Professional development training for teachers improves their ability to

implement sheltered instruction strategies and empirically-based elements of culturally responsive classrooms that are beneficial to culturally and linguistically diverse students.”

All of the elements presented in this action research study are important for delivering content that is comprehensible to ELLs as well as creating culturally responsive environments. However, it is exciting and useful to the district in which this action research took place to be aware of the sheltered instruction and culturally responsive components teacher-participants had the confidence to effectively implement a short time after receiving PD. Being able to clearly define language objectives is an essential and impactful component of sheltered instruction as it requires planning and thinking ahead to purposely have students use language functions that will help increase their English proficiency while gaining content knowledge. Explicitly linking concepts to students' background experiences is a feature that appears both in sheltered instruction strategies and recommendations for creating culturally responsive classrooms. Thus, this is a high leverage feature that is likely to impact engagement, content knowledge, and English language development. When instruction is scaffolded to promote CLD student learning provides incremental support that bridges the gap between what students know and what they need to do. If teachers can do this effectively, the strategy helps create a supportive learning environment. All three features are part of the foundation necessary for delivering grade-level appropriate content to bilingual learners, “Scaffolding occurs when a teacher ensures: (1) that a student has enough prior experience or prior knowledge to make a task understandable and personally relevant... (2) The student is made familiar with the purpose, structure and linguistic features of the kind of text they will write...” (Baker, 2006, p. 304). Therefore, the results of this study indicate that the implementation of multiple, highly effective instructional strategies can be improved through school-based PD modules. Table 24 summarizes these results and includes

the means, standard deviations, and p value for the elements that were statistically significantly higher according to the post-intervention observations.

Table 24 Pre and Post-Intervention Results by Observation Protocol Element

<i>Standard/ Element</i>	<i>Mean</i>	<i>Stand. Dev.</i>	<i>Mean</i>	<i>Stand. Dev.</i>	<i>n=9</i>	2 sample t-test (is post mean higher than pre?)	
	<i>POST</i>		<i>PRE</i>			<i>P value</i>	<i>Stat. Significant</i>
2	1.78	0.83	0.11	0.33		0	YES
7	2.67	0.71	1.89	0.33		0.0043	YES
21	2.78	0.44	2.33	0.50		0.0298	YES

Third Iteration Secondary Data

After the first and second iterations were conducted and the data was analyzed, the researcher had the opportunity to participate in a district-wide professional development planning conversation with other district administrators. Thirty-one building and district leaders, including the researcher, participated in an activity with the objective of generating a list of “good” and “bad” professional development practices. The administrators were instructed to create two columns on a sheet of paper. On the left, meeting participants noted things that were notably good from professional development they themselves had been participants in throughout their careers. On the right, participants noted things that were notably bad professional development components and practices that they had experienced.

The lists were generated starting with the “good” list. Attendees were given approximately ten minutes to complete the oral prompt, “Think of professional development that you have been a participant in at any point in your career that you really enjoyed, benefited, or learned from. Under the ‘good’ column, write down what was good about it.” Once the time was up, a similar prompt was given – this time requesting that the administrators recall negative

PD experiences and list those characteristics. People shared and discussed both lists, writing down any characteristics mentioned by colleagues that were not already on their own paper. Table 26 lists the good and bad PD characteristics generated from this exercise. The researcher made the decision to include this relevant secondary data as the final iteration of this action research study was a PD guide/protocol intended for use by the district, specifically led by the people who participated in the exercise that generated the secondary data. In addition, many of the traits that emerged coincide with codes from the first and second iteration interviews (see Table 15, Table 23, and Table 25), further strengthening the data informing this action research study. The list is also included in the PD guide (see Appendix O).

Table 25 Good and Bad PD Traits – Administrator Generated

Professional Development Experiences	
<i>Good</i>	<i>Bad</i>
Objectives clearly defined	Presenter had condescending tone
Knowledgeable presenters/ experts	Material that I did not “buy in” to
Presented by teacher experts	Talked <i>to</i> not <i>with</i> participants
Information I could immediately apply/ relevant	Presenter showed bias
Actionable take-aways	Added additional stress/ responsibility
Interactive format/ workshop model	Did not apply to my work
Hands-on	Presenter had poor facilitation skills
Contained new information	Too many activities
Collaboration time	No follow-up/ “one and done”
Allowed discussion	Assumed everyone had the same level of knowledge
Repeated/ follow-up/ extended time	Too large of a group
Organized	Poor use of technology
Presenter has credibility – has been in classroom	Longer/slower than needed
Visited class & provided feedback	PD just for the sake of offering PD/ no substance
Theoretically-based	Outside of comfort zone
Asked thought provoking questions	Company rep/ trying to sell a product/ ulterior agenda
Uses appropriate humor	Not enough time
Asked questions beforehand/ understands audience needs	Too much information
Pertained to job/ responsibilities	
Modeled strategies	
Encouraged to try new strategy/ permission to “fail”	

Summary

The first and second iterations of this action research study yielded results that were used to refine the content and format of professional development (PD) intended for mainstream teachers of English language learners (ELLs) and culturally and linguistically diverse (CLD) students. After the first iteration, results led to an hour being added to the PD workshop. The additional hour was dedicated to an additional activity/opportunity for discussion, and an additional activity where participants reviewed the strategies. For the third iteration, the researcher added a list of good and bad PD traits that emerged from secondary data as well as narratives to describe the structured activities/opportunities for discussion in a way that could be replicated since these were elements that participants deemed vital when interviewed. Furthermore, the results were analyzed as they relate to the research questions. Below are the research questions and their corresponding results summarized.

Overarching Question:

1. Did professional development for mainstream teachers of culturally and linguistically diverse students have an impact on teachers' (a) Lesson Preparation, (b) Building Background, (c) Comprehensible Input, (d) Interaction, and (e) Practice of Elements for culturally responsive classrooms?

Teacher-participants were observed prior to and about two weeks after their participation in the PD intervention using a protocol which contained 27 observable components or elements of sheltered instruction and culturally responsive teaching. A two sample t-test for means was conducted on the means of the total protocol scores as well as for each of the 27 elements from the observation protocol. The t-tests revealed that elements 2, 7, and 21 were statistically significantly higher on the post-intervention observations. The second element: Language

objectives clearly defined, displayed, and reviewed with students, increased from a mean of 0.11 to 1.78 (elements were measured on a scale of 0 to 4). The seventh element: Concepts explicitly linked to students' background experiences, increased from 1.89 to 2.67. Lastly, the 21st element: Instruction is scaffolded to promote CLD student learning, increased from a mean of 2.33 to 2.78. Thus, the results are affirmative for specific parts of the overarching research question [(a) Lesson Preparation, (b) Building Background, and (e) Practice of Elements for culturally responsive classrooms].

Quantitative Hypothesis:

2. Professional development training for teachers improves their ability to implement sheltered instruction strategies and empirically-based elements of culturally responsive classrooms that are beneficial to culturally and linguistically diverse students.

As stated in response to the overarching question, a two sample t-test for means was conducted on the means of the total protocol scores as well as for each of the 27 elements from the observation protocol. The t-tests on those total scores did not indicate a statistically significant difference before and after the PD intervention. However, by comparing the means of the observation protocol elements from before the intervention and the means of the observation protocol elements from after the intervention, the researcher was able to determine that the post-intervention results were statistically significantly higher than the pre-intervention observations at an alpha level of .05 for elements 2, 7, and 21. The second element: Language objectives clearly defined, displayed, and reviewed with students; the seventh element: Concepts explicitly linked to students' background experiences; and the 21st element: Instruction is scaffolded to promote CLD student learning increased significantly.

Qualitative Research Questions:

3. What do teacher participants think about the applicability of professional development with strategies to support culturally and linguistically diverse students?

In the first iteration, 15 themes emerged from the interviews during which all four participants often chose to discuss how the content received in the PD and how they would apply it in their classrooms. For example, in Theme 12: Strategies, all four participants talked about either the general helpfulness of receiving strategies, or mentioned specific strategies that they were glad to receive or chose to implement after the workshop. In Theme 13: Heightened Awareness, there was a plethora of examples from participants noting that the workshop made them have a heightened awareness of what services are provided to ELL and CLD students, how teachers can create culturally responsive environments, awareness of the linguistic challenges many students face, and an ongoing awareness that now guides lesson plans and classroom activities.

Second iteration interviews further supported that participants felt the professional development and strategies were applicable to their practice. Of ten themes that emerged from five participant interviews, one was applicability. In Theme 6: Applicability, interviewees mentioned that the content in general could be used immediately, as well as stating specific strategies or elements that could be applied in their classrooms. One example specifically noted, “I felt that the PD could be used immediately in my classroom with students that I have that are ELL students.”

4. What is the teacher participants’ comfort level with teaching culturally and linguistically diverse students after receiving professional development (PD) on the topic?

In order to determine if the second iteration PD session influenced participants’ thoughts and comfort level, a two proportion z-test was used to determine if differences in response

proportions from the pre-PD survey and the post-PD survey were statistically significant. The two proportion z-test indicated for which questions the proportion of “yes” answers increased at a 95% confidence interval for the true population and alpha level of 0.05. After the first iteration, the two proportion z-test determined that the PD helped increase the proportion of “yes” answers in questions 5 and 6 - “I plan to make changes in my practice in order to ensure that my classroom environment is culturally inclusive” and “I plan to make changes in my practice in order to deliver culturally responsive instruction in my classroom”. In the second iteration, z-test results determined that the PD helped increase the proportion of “yes” answers in question 6 - “I plan to make changes in my practice in order to deliver culturally responsive instruction in my classroom”.

Chapter V: Conclusions

Summary

This action research study evaluated and sought to improve teacher professional development (PD) strategies designed to instill culturally and linguistically responsive pedagogies in classrooms at an elementary school. The study assessed participants' practical application and perceptions of the application of English learner instruction strategies and culturally responsive teaching strategies in mainstream classrooms. The first phase of the study included piloting the survey instrument with participants who attended a conference on bilingual education, and conducting a thorough literature review. The action research study was then designed so that 29 teachers in a public elementary school received professional development (PD). Of the teachers that participated in the PD, nine met the criteria and were willing to participate in the study - four in the first iteration and five in the second. Observations, pre- and post-PD surveys, and participant interviews provided insight into the teachers' PD needs, the impact of the intervention, and provided feedback on the opportunities and challenges throughout the teachers' learning experience. The researcher was also a participant and facilitator relying on deep reflection to improve the PD modules.

The first and second iterations of this action research study yielded results that were used to refine the content and format of professional development (PD) intended for mainstream teachers of English language learners (ELLs) and culturally and linguistically diverse (CLD) students. Careful analysis and deep reflection led to adjustments in both the second and third iterations. After the survey and interview data from the first iteration were analyzed, changes to the intervention in the second iteration included an additional activity to illustrate how conversational language is acquired faster than academic language, and to create another

opportunity for discussion; an additional activity to scaffold implementation – participants reviewed the strategies, discussed them in grade-level teams, and identified something(s) they did in their classrooms already, something(s) they sometimes did but could modify, and something(s) they would have liked to try to implement; and in order to implement the additional opportunities for practice and interaction, an additional hour of time was added to the workshop.

After the first and second iterations were conducted and the data was analyzed, the researcher also had the opportunity to participate in a district-wide professional development planning conversation with other district administrators. Thirty-one building and district leaders, including the researcher, participated in an activity during which a list of “good” and “bad” professional development characteristics were generated. The exercise was intended for district administrators to compile and refer to the list while planning PD for their buildings. The researcher included the list as secondary data in the results section of this report as well as the final PD protocol as many of the traits that emerged coincided with codes from the first and second iteration interviews – supporting the findings from teachers this action research study – and it was applicable to the researcher’s plans of continuing to contribute to district professional development design and planning. For example, both teachers and administrators valued PD with knowledgeable and relatable presenters, opportunities for collaboration, applicable/actionable take-aways, that are well-organized, that include observations/classroom visits and feedback, and encouraged them to try new strategies. This information is valuable, because similar to planning for a classroom, planning for adult learners should be based in good practice as well as be engaging if we want participants to move from learning to application.

The researcher’s experience as a teacher and building administrator has been that PD planning is a delicate process. There is only so much time in a school year during which

teachers and other staff can be pulled from teaching and other duties to provide in-service training. The limited time is further diminished by competing priorities and topics that are all important such as special education policies and strategies, evolving curricula, updated federal and state standards, high stakes test implementation, data analysis, and the list goes on and on. One thing the researcher hopes the results of this study can establish is that an impact can be made even in a limited amount of time. There are entire graduate courses dedicated to sheltered instruction, and other sub-categories of bilingual and multicultural education. Thus, it is obvious that in the short PD sessions that transpired as the intervention in this action research study, a limited amount of information on the topic of meeting the needs of culturally and linguistically diverse (CLD) students and creating culturally responsive classroom environments could be conveyed. Yet, those short sessions generated enthusiasm and what seemed like genuine concern for that student population, according to teacher-participant surveys and interviews; and that enthusiasm was transferred into action as evidenced by the three impactful elements that observations and t-tests revealed were significantly applied after participants attended the PD sessions. As the population of CLD students continues its rapid growth (Alanis & Rodriguez, 2008; Kandel, 2009; Mendez, Crais, Castro & Kainz, 2015; Cortina, Makar & Mount-Kors, 2015; Ruiz, 2011), hopefully districts can prioritize time for teachers' in-service training to meet the needs of all our students and understand that incremental change can have a powerful impact on school climate and student outcomes. While PD sessions such as the intervention in this study can be useful in the short-term, the commitment has to be ongoing in order for districts to see the long-term effect (Vogt & Rogalla, 2009; Kandel, 2009).

Overarching Question:

1. Did professional development for mainstream teachers of culturally and linguistically diverse students have an impact on teachers' (a) Lesson Preparation, (b) Building Background, (c) Comprehensible Input, (d) Interaction, and (e) practice of elements for culturally responsive classrooms?

Teacher-participants were observed prior to and about two weeks after their participation in the PD intervention using the protocol which contained 27 observable components or elements of sheltered instruction and culturally responsive teaching. The researcher was able to determine that elements 2, 7, and 21 (see table 24) were statistically significantly higher at an alpha level of 0.05 on the post-intervention observations. The second element: Language objectives clearly defined, displayed, and reviewed with students, increased from a mean of 0.11 to 1.78. The seventh element: Concepts explicitly linked to students' background experiences, increased from 1.89 to 2.67. Lastly, the 21st element: Instruction is scaffolded to promote CLD student learning, increased from a mean of 2.33 to 2.78. Thus, the results affirm specific parts of the overarching research question [(a) Lesson Preparation, (b) Building Background, and (e) Practice of Elements for culturally responsive classrooms] and the quantitative hypothesis, "Professional development training for teachers improves their ability to implement sheltered instruction strategies and empirically-based elements of culturally responsive classrooms that are beneficial to culturally and linguistically diverse students."

The results above mean that providing teachers with terminology, demographics about their own school and learners, an overview of the stages of language acquisition, research-based strategies that are applicable to their subject and grade level, non-judgmental feedback and praise, and opportunities to reflect and practice positively impacts teachers' practice of culturally responsive pedagogy. Further, the themes that emerged from the interviews frequently noted the

content received in the PD and how teachers would apply it in their classrooms. For example, in the first iteration Theme 12: Strategies, all four participants talked about either the general helpfulness of receiving strategies, or mentioned specific strategies that they were glad to receive or chose to implement after the workshop. In Theme 13: Heightened Awareness, many examples from participants noted that the workshop made them have a heightened awareness of what services are provided to ELL and CLD students, how teachers can create culturally responsive environments, awareness of the linguistic challenges many students face, and an ongoing awareness that now guides lesson plans and classroom activities. In addition, during the second iteration interviews one of the codes was specifically Applicability. Within that theme, participants indicated that the content in general could be used immediately, as well as stated specific strategies or elements that could be applied in their classrooms. As a pragmatist, the researcher will continue to put this knowledge into practice at the school and district level and through the course of this action research study, she has already taken opportunities to include culturally responsive pedagogy in the following school year's PD plan as well as working with other administrators to develop district-wide initiatives that will implement similar in-service training at other sites. It has become obvious to the researcher-practitioner that others see the value of supporting all learners, but in some cases did not know where to begin supporting teachers in order to have an impact on student learning.

The process of getting to this study's findings through action research has been integral to the researcher's personal growth. Having a theoretical background and experience in the field of bilingual and multicultural pedagogy was helpful in initial planning, but the process of the PD intervention development, the creation and development of tools to measure the results, and deep

reflection on the findings between iterations one and two resulted in a much more informed and methodological process that can be replicated and includes the voices of teachers.

Conclusions

Once triangulated, the data in this study supported the quantitative hypothesis and provided relevant evidence that the researcher could use to inform her own best practice as a leader and presenter, as well as could be used to refine the PD intervention and create guidelines for a PD plan that can help guide future school and district PD. Specifically, the researcher determined that providing teacher-participants with terminology, demographics about their school and learners, an overview of the stages of language acquisition, research-based strategies that are applicable to their subject and grade level, non-judgmental feedback, and opportunities to reflect and plan for implementation positively impacts teachers' perceptions and application of culturally and linguistically responsive practices. The themes that emerged from the interviews cited the usefulness of the content received during the intervention and how teachers would put it into practice with codes such as Strategies, Heightened Awareness, and Applicability. Survey data from the first and second iterations also supported that teachers planned to make changes in their practice in order to deliver culturally responsive instruction. The researcher believes this momentum could be supported by continuing to train and support teachers in the topic of culturally and linguistically responsive pedagogy and the third iteration PD guide is a tool that help the school and district's continuous improvement.

The researcher acknowledges that some changes in the timeline, such as giving participants more time to implement the strategies, could have led to more meaningful results. Also, the generalizability of the results themselves is not claimed due to the small sample size at one specific elementary magnet school. However, the limitations were considered in the

refinement of the third iteration of this action research study, and the positive results of the first and second iterations can contribute to the field of in-service training to support culturally and linguistically diverse students. In addition, the thorough literature review along with the theories that guided this study and the contents of the PD would support a prediction that the findings can be applicable in other settings, as long as the elements and steps outlined in the culminating guide and PD plan are included.

The third iteration of this action research is a guide and PD plan created by the researcher. The Culturally and Linguistically Responsive Classroom Professional Development Plan is included in Appendix O. It discusses the following elements that the researcher determined were imperative to planning PD based on the results of this study, analysis of the data, and deep reflection:

- a. Effective Presentation Skills/Delivery
- b. Good and Bad PD Traits
- c. Hook
- d. Background
- e. Research-based Teaching Strategies
- f. Praise and Specific Areas in Need of Improvement
- g. Opportunities to Gain Perspective
- h. Opportunities for Discussion/Questions
- i. Opportunity to Plan/Apply Strategies
- j. Opportunities for Collaboration
- k. Detailed Hand-outs/Resources for Reference
- l. Ideas, and Examples

- m. Point Persons for Follow-up/Resources
- n. Homework/Specific Expectations that Knowledge will be Applied
- o. Measures for Presenters/Administrators
- p. Evaluate and Plan Future PD

Based on the interview data from this action research study, the researcher determined that effective presentation skills and the manner in which information is delivered to participants are integral parts of effective PD. Further, the researcher supported this supposition with research on public speaking and included relevant tips in the PD guide. Some tips for effective presentations include: show your passion – it should be apparent that you have a deep, heartfelt belief in your topic; start strong - engage the audience from the very beginning; keep it short – audiences have a short limit before their minds wander from passive listening; get out from behind the podium - remove physical barriers between you and the audience in order to build rapport; use written documents (research papers, handouts, executive summaries, etc.) only for the expanded details - audiences will be much better served receiving a detailed, written handout as a takeaway from the presentation, rather than a mere copy of your PowerPoint slides (Reynolds, 2008). Froman (1994) highlighted that workplace learning should be designed to provide individuals with the knowledge and skills required to improve performance, and that individual development should also advance the overall mission or goal of the organization.

Further, effective professional development for mainstream teachers of English language learners (ELLs) must be grounded in the concept that content and language are inextricably linked and that linkage has to be reflected in teachers' instructional practice (Schleppegrell, 2012). It is critical for improved teacher practice and improved student achievement to have a content focus that emphasizes teachers' understanding of and strategies they can use for teaching

academic subject knowledge (Penuel, Gallagher & Moorthy, 2011; Lee, Deaktor, Enders & Lambert, 2008).

After the first and second iteration cycles of this action research study were complete, the researcher had the opportunity to participate in a district-wide professional development planning conversation with other building and district administrators. During that experience two lists – one of good PD characteristics and one of bad PD characteristics – were generated from the discussion. The researcher noticed that many of the traits valued by administrators when attending PD coincided with the codes generated from teacher perspectives. For example, knowledgeable presenters/experts, relevant information, collaboration and discussion opportunities, follow-up/ extended time, visiting classrooms and providing feedback, and modeled strategies were positive attributes of PD brought up by both teachers and administrators. Therefore, the list is included in the PD guide as administrators themselves are at the helm of PD planning and should remember that what is effective for their own training will likely be effective for other adult learners.

Portions of the PD intervention workshops that gave participants the opportunity to gain perspective were cited in both the first and second iterations of this study. In participant interviews there were comments such as, “I had never thought about that”, in regard to the difficulty of learning English or how valuing someone’s culture (or not valuing it) affects their acculturation and, in turn, their ability to acquire a second language. It seemed helpful to the rest of the workshop to build on a perspective exercise early on. Consequently, the researcher shares the anecdote from Reyes and Crawford (2010) she herself shared with teacher-participants during the study’s workshop components in the PD guide as an example of a “hook”. The

researcher also discusses the importance of capturing the audience's attention early on during a PD session.

Another essential component of PD for the purpose of improving instruction for culturally and linguistically diverse students was giving teacher-participants the background knowledge (terminology, demographics, theory/language acquisition stages) that would support a greater understanding of the need and scope of implementation for the specific PD site. Providing background knowledge also serves as a way to scaffold the learning of research-based teaching strategies, which are the meat of PD intended to improve the classroom environment and instruction of CLD students. For the PD sessions delivered as the intervention in this particular study, 27 elements of sheltered instruction were the focus. That decision was made by the researcher based on the limited time that was available in the district and school's PD calendar for the school year. The elements resulted from – in the interest of time – choosing four of the eight Sheltered Instruction Observation Protocol (SIOP) components and their corresponding features as well as elements of culturally responsive classrooms that coincided with the features of delivering language instruction via content (sheltered instruction).

With that in mind, the researcher does not make recommendations on exactly which components or features of sheltered instruction and culturally responsive classrooms should be included in the PD plan outlined in the guide. Instead, the researcher makes recommendations based on the interview and survey data in this study – participants recommended more time per session as well as more frequent sessions/follow-up – on how much information and how many components and their corresponding features/strategies should be included in the workshop. The researcher recommends in the PD guide that for a half-day session (3 hours), two SIOP components and strategies specific to the grade level should be the focus with a listing and cross

analysis of five culturally inclusive classroom components. For a full day session (6 hours), the researcher recommends that four SIOP components be introduced with no more than ten culturally inclusive classroom components that overlap and corresponding strategies for the target grade level(s) and subject(s). There are eight SIOP components, therefore, the researcher endorses that least 12 hours over time/sessions would be necessary to introduce participants to the components and strategies, to allow for time to practice, and to include sufficient opportunities for discussion.

The importance of feedback was a theme throughout the data analysis cycles in this study. In addition, the secondary data consisting of a list of good and bad PD traits generated by administrators noted feedback as an element of good professional development. The participants in this study appreciated receiving positive feedback in addition to specific areas that they could focus on improving. As a way to offer feedback, the researcher provides the instrument she adapted and used to observe teacher-participants in this study, complete with instructions to highlight what is already being implemented and what strategies could use improvement or are not implemented at all. Since the instrument was adapted to observe the specific components addressed in this study, it is a guide and should be adapted to include the specific components and features of additional PD sessions.

The aforementioned “hook” provided participants with an opportunity to reflect on the value of other cultures. The PD interventions in this study also included opportunities to gain perspective on the difficulty of learning some of the sounds in the English language as well as conversational versus academic language. These experiences were highly regarded and cited as motivators for teacher-participants to put the PD contents into practice. Consequently, the researcher provides examples on how to illustrate the difference between basic interpersonal

communication skills (BICS) and cognitive academic language proficiency (CALP), as well as a comedy video clip that illustrates one of the most difficult sounds in the English language: “ough” (<https://www.youtube.com/watch?v=MAL9VD6Lz9Y>).

In addition, the researcher determined as a result of participant feedback in this study that opportunities for discussion and questions were valuable and gave participants an opportunity to process the information presented. Thus, it is noted in the PD guide that such opportunities are a fundamental part of effective PD along with opportunities to practice and plan applying strategies, and opportunities for collaboration. The researcher provides examples of activities in separate sections for each type of opportunity as part of the PD guide.

In order to help participants continue the work beyond the workshop/PD session, the researcher suggests that detailed hand-outs, resources, and examples are provided and makes recommendations about how those should be created and delivered. The value of resources provided during the PD was a frequently mentioned theme in this action research study. Similarly, having a point person available in the building for follow-up was cited as influencing participants’ confidence to implement new strategies.

Another way to take the PD from theory to practice is to leave participants with specific expectations that the knowledge from the training will be applied in their classrooms. The researcher used the PD guide to advise that participants can complete a detailed, but simple assignment on their own or at their next team meeting. The activity that the researcher used in the PD sessions for this study is provided as a suggestion and guide.

Teacher PD time is limited and valuable, so the researcher is a proponent of the idea that any effort that is implemented – regardless of topic or focus – should be evaluated for success and continued improvement. Therefore, the PD guide includes measures for

presenters/administrators, the protocol that was used in this study as an example, as well as instructions on how to modify and calibrate an instrument to meet the school or district's needs. Along those lines, the researcher concludes the PD guide with a section titled "Evaluate and Plan Future PD." In that section, the researcher reiterates that it is important to know if the PD was helpful and effective in impacting practice, and recommends that evaluation can be done in various ways such as via surveys, focus groups, and/or observation data. Additionally, the researcher recommends that if there are specific areas that seem to have been impacted by the PD that data should be shared with participants, as should be any areas that need improvement, and that can be addressed in future PD sessions.

Limitations

This study was an action research study bound by time constraints, access to limited planned professional development days, one school site as the location, and a limited number of participants. The study was limited to one urban elementary school in one magnet school system that has school buildings in both urban and suburban environments with nine teachers participating. The certified teaching staff and potential participant pool at the study site was small, consisting of fourteen classroom teachers, five special education teachers, five interventionists, and five specials/enrichment class teachers. The participant pool was further narrowed by medical, maternity, and other leaves that impacted some potential participants' ability to be present during observations, during the intervention itself, or for the interview process. Any participants that were unable or unwilling to complete any of the study components, are not featured as study participants. There are also limitations to using statistical analyses such as t-tests on populations as small as this study's sample.

Despite limitations, the process used in this study to assess participants' needs and create customized professional development (PD) is likely to be applicable in other sites that are interested in creating customized PD. However, it is important to note that the results of this study were limited to the perspectives and observations of teachers participating in this study. The results are not representative of other teachers in the school nor district. The secondary data was also limited to the perspectives of the administrators that participated in the PD planning conversation that generated the list of good and bad PD traits. The knowledge gained from this study supports the constructivist perspective of the researcher that guides the planning of personalized PD for culturally and linguistically responsive classrooms and is expected to be applicable for other PD topics and in other settings. Although the researcher was knowledgeable and experienced in the area of second language acquisition and multicultural education, the feedback collected from participants via surveys and interviews added to that knowledge via data analysis and reflection, and guided the refinement of each iteration of this action research study. The researcher became aware that more time than she anticipated was necessary to thoroughly address the components included in the PD workshop, that certain elements were applied by most participants soon after the PD sessions because they did not require any additional resources for implementation, and that participants can develop a genuine enthusiasm for a topic that could be uncomfortable if they feel supported and presented with earnestness rather than judgement. The results of this action research study affirm the constructivist idea that learning occurs as people have experiences and reflect on those experiences, learning as a result of this study was apparent in the participants as well as the researcher.

Researcher Praxis

Action research is, “truly a systematic inquiry into one’s own practice” (Mertler, 2014, p. 4). Conducting this study has given the researcher insight into her own beliefs, practice, and how those can come together to meet the needs of the school where she serves as an instructional leader, the district where the school is located, and the staff that she collaborates with. The researcher has become more conscious of her own belief that involving participants in the design and refinement of content that is intended to improve their practice is essential to participants taking ownership of positive changes in teaching and learning. Further, the researcher has learned about her own style and role as a presenter, becoming more conscious of leading workshops by using the same types of strategies promoted in the workshop and not being afraid to share personal experiences that help participants connect with her. For example, when illustrating that certain sounds in the English language do not exist in other languages, the researcher-presenter shared a personal story from her own journey learning English as an elementary-aged child. That anecdote came up as an “aha” moment in several participant interviews. Throughout the process of this study, the researcher also got to know much of her staff better. Several teacher-participants took the initiative to continue conversations and ask the researcher questions, or share anecdotes from their own classrooms after the PD sessions. With that additional awareness, the researcher feels more prepared to serve the staff at the research site as an instructional leader, as well as more confident in helping district administrators with initiatives at the district level.

There were several implications that resulted from the data analysis that the researcher found helpful for herself as well as, presumably, for other school leaders designing PD. Foremost, the researcher recognizes the importance of carefully constructing PD so that all the integral elements of a target pedagogical approach are included. For example, the PD

interventions in this study included four of eight SIOP elements, with the idea that eventually the other four will be addressed. However, particularly in the case of culturally and linguistically diverse pedagogy, the researcher has gained a heightened awareness of some high leverage features of sheltered and culturally responsive instruction that teachers can implement immediately after participating in PD. The features are completely under teachers' control and can be implemented at cost zero. The analysis of the observation data in this study revealed that three particular elements were employed by participants consistently after their participation in PD. After the PD intervention, participants were more likely to clearly define language objectives, explicitly link concepts to students' background experiences and scaffold instruction to promote CLD student learning. Teacher-participants were able to implement those features without needing specific classroom materials/pre-packaged curricula, additional funds, nor would they change the content of the units and lessons teachers already had planned.

While all of the research-based features of sheltered and culturally responsive instruction are important – in this study the researcher focused on introducing teachers to 27 – 16 are the features of the four selected SIOP components and 11 were elements of culturally responsive classrooms that the researcher determined from the literature would help reinforce the selected SIOP features as they include similar and overlapping suggestions (Cartledge & Kourea, 2008; Savage et al., 2011; Teel and Obidah, 2008). The researcher planned the content of the PD sessions based on the research and theoretical bases noted in this study's literature review, refined the workshops based on participant feedback, and the process was approved by the building principal as well as a district Assistant Superintendent. The workshops took place during scheduled building-based professional development. The confidence placed in the researcher by building and district administrators was evidence of the district's commitment to

equity and addressing the needs of all students. The researcher is confident that the school and district have the potential to transform classrooms into culturally and linguistically responsive communes.

The researcher believes the concept of high-leverage strategies that can be implemented at no cost can have an immediate impact in any educational setting, especially in districts where funds and resources are scarce. Ultimately, the researcher wants all public schools to be funded at the level necessary to meet their community's needs. However, this is not reality. Therefore, it is exciting to recognize that it is possible, per this action research study, to implement incremental changes that included clearly defining language objectives, explicitly linking concepts to students' background experiences, and scaffold instruction to promote CLD student learning – all of which are research-based strategies that would benefit culturally and linguistically diverse students at no cost. The researcher cautions that implementing these elements alone is not the most effective nor comprehensive approach to educating CLD students. However, with the rapid CLD student population growth, lack of teacher preparation to meet the needs of that population, and scarcity of adequate programming to meet our students' needs, schools and districts have to implement whatever they can while simultaneously advocating for the ideal situation. As is supported in much research (Kim, 2009; Baker, 2006; Rolstad et al. 2005; Villegas et al., 2018) the researcher believes the soundest initiatives include comprehensive bilingual programs, dual language programs, and culturally and linguistically responsive mainstream classrooms. Districts should consider their specific populations and their learners' needs while consulting the literature to develop programs based on best practice. In other words, there is no silver bullet to address the needs of CLD students, rather multiple initiatives that should all be considered.

This action research study became a valuable part of the researcher's personal and professional journey. As an immigrant and ELL herself, the researcher has an intimate interest in the education of CLD students and helping to build capacity in other practitioners. This research is enhancing decades of personal and professional experience. The researcher was able to compile information from all the data sources in this study to create a PD guide that her district, as well as others, can use to ensure that they have the important characteristics of effective professional development in mind while planning PD to help teachers that serve CLD students. Besides the high leverage features previously mentioned, one thing that the researcher extrapolated from the data, is the importance of providing opportunities for participants to experience the concepts that are critical to understanding and eventually taking ownership of the application of the PD content. It was obvious from the interview data that participants were significantly impacted by the presentation hook as well as the video clip that illustrated just how difficult it is to read words in English when it is not your first language. One participant expressed during the interview that, "I didn't even think about the challenges that those students had, so it brought it into light. Um, it was a little short clip that really brought it (difficulty of English language) to light."

Further, going beyond the tangible data and drawing from the experiences and informal conversations that the researcher had with teacher-participants after the PD modules, she feels hopeful that although mainstream teachers are generally underprepared to meet the needs of CLD students, it is possible to effectively remedy that deficiency with in-service training. Due to the fact that sheltered instruction and culturally responsive strategies are not ranked based on importance, rather that all components and features can be combined – or sometimes used in isolation – to meet the needs of ELLs, the researcher does not make recommendations on exactly

which components or features of sheltered instruction and culturally responsive classrooms should be included in one PD session. The decisions on which elements to prioritize in a specific school should be made based on the needs of the teachers and students in a specific setting by taking into account the demographics of the student population and what the teachers may already know and implement (surveys, focus groups, or observations can be helpful means of determining teacher needs). The researcher prefers to make recommendations for future practice and implementations about how much information and how many components and their corresponding features/strategies should be included in PD workshops depending on the time. Based on the interview, survey, and observation data in this study, the researcher recommends that for a half-day PD session (3 hours), two SIOP components and strategies specific to the grade level should be the focus with a listing and cross analysis of five culturally inclusive classroom components. For a full day session (6 hours), the researcher recommends that four SIOP components be introduced with no more than ten culturally inclusive classroom components that overlap and corresponding strategies for the target grade level(s) and subject(s). Since there are eight SIOP components that are made up of 30 features, the researcher endorses that least 12 hours over time/sessions would be necessary to introduce participants to the components and strategies, to allow for time to practice, and to include sufficient opportunities for discussion. The researcher was fortunate to receive the support of building and district administrators in order to implement the intervention sessions that led to the data in this study. Further, the researcher believes that it is imperative for districts that want to improve teaching – and as a result, learning – prioritize methods for culturally and linguistically responsive classrooms as part of each year’s PD plan.

At different points after the PD intervention iterations, various participants initiated conversations with the researcher about what they were either doing or planning on doing in their classrooms that would improve the cultural climate or be considered culturally relevant instruction. The researcher was impressed with one PD attendee in particular, who stopped the researcher in the hallway or entered her office on numerous occasions to share how they were using the resources from the PD and how students were responding to some of the new activities implemented by the teacher-participant. The participant was very candid about previously avoiding books and classwork with sensitive topics related to race and culture, as they did not feel equipped to provide students good answers to the questions that would likely arise during discussions. In addition, the participant shared that while clicking around on some of the websites suggested in the PD, they ended up taking an online bias quiz which revealed information about themselves that the participant was surprised at. The researcher watched that teacher become empowered to teach and discuss difficult topics as well as learn more about themselves so that they could better serve their students. The researcher was overwhelmed with optimism at the prospect of teachers taking initiative to gain the cultural capital to meet the needs of all students, including CLD populations.

Lastly, as a pragmatist, the researcher was enthusiastic knowing that this research immediacy affected local conditions, as was part of the purpose of this action research study. Not only was the effect of the PD modules implemented in the school site's plans for school improvement, but it also began having an impact at the district level. Soon after the three iteration of this cyclical action research study were complete, something that came up during a discussion between the researcher and district leaders was that leaders who may lack expertise in language acquisition, sheltered instruction strategies, and culturally responsive pedagogy are

responsible for observing and evaluating teachers in all content areas. One district leader expressed that it would be helpful to have a simple document highlighting some of the features administrators should see in a culturally and linguistically responsive classroom. As a result of that request, and drawing from this research study, the researcher created a district resource titled “‘Look Fors’ for Culturally and Linguistically Responsive Classrooms” (see Appendix P). In the “Look Fors” document, the researcher noted some of the observable components of culturally and linguistically responsive classrooms by categorizing them into what students would be observed doing (and, conversely, not doing) as well as what teachers would be doing and/or have in place. The fact that the process and results of this research study have resulted in actionable data and immediate implementation is not only inspiring, but the embodiment of the researcher’s goal.

Practical Implications

When knowledge and skills relating to the instruction of ELLs are infused into subject matter professional development activities, all teachers, not just those who hold a bilingual/ESL credential, learn about how best to meet the academic and linguistic needs of language learners. This view acknowledges the reality that a shortage of adequately prepared and credentialed bilingual/ESL teachers exists and that all teachers should receive training for work with ELLs (Kandel, 2009). Teaching methods are crucial to student learning; therefore, it is alarming that few educators in the United States receive preservice preparation to teach ELLs prior to entering the classroom and they must learn these essential skills on the job (Batt, 2010; Villegas et al., 2018). Predominant themes for modifications made after PD and coaching in a study by Batt (2010) were: consistent posting of content and language objectives; more pictures and visuals; more partner and group work; raised expectations for ELLs; more applicable instruction for all

students; and more connections with students' home environments. Batt's research resonated further with the investigator in this study, as in interview data analysis determined that the elements that t-tests determined increased significantly in implementation after the PD intervention in this study were: Language objectives clearly defined, displayed, and reviewed with students; Concepts explicitly linked to students' background experiences; and Instruction is scaffolded to promote CLD student learning.

Teacher-participants in this study repeatedly brought up how helpful the strategies they were presented with were, that they were grateful for being able to better meet the needs of their English language learners (ELL) and culturally and linguistically diverse (CLD) students, and how engaged they were in PD that was well-organized and maximized the allotted time with useful information. However, the momentum and teacher support should continue in order for a long-term impact to take place. Continuous professional development and follow-up support are fundamental to the aim of building capacity in teachers and improving outcomes for CLD students (Vogt & Rogalla, 2009; Kandel, 2009; Ball et al., 2008; Ruiz, 2011).

Additionally, the secondary data consisting of a district and building administrator generated list of good and bad PD traits reinforced many of the same characteristics that were effective in this study. Some of the positive PD attributes that were referenced by both administrators and the teacher-participants in this study were knowledgeable presenters/experts, relevant information, collaboration and discussion opportunities, follow-up/ extended time, visiting classrooms and providing feedback, and modeled strategies. These perceptions of effective PD characteristics are significant as the need for improving teacher efficacy in the use of strategies for teaching CLD students through in-service training is well supported by the literature; particularly because training in traditional teacher programs does not necessarily equip

teachers nor builds their capacity to meet the needs of culturally and linguistically diverse (CLD) students (Batt, 2010; Teemant, 2011; de Jong et al., 2018). Therefore, in the district that houses the site for this action research study, it was encouraging to note that teachers and administrators have a similar vision of what good professional development looks like. This common ground can be a starting point for change. Further research on the impact of in-service teacher training on the use of sheltered instruction and culturally responsive pedagogy should be explored in other settings, particularly research in which the PD participants are further supported with classroom coaching, which was a helpful element in Batt's study (2010), but was not explored in this particular study.

Another topic that emerged from the surveys and interviews was the value of knowing who else in the building teachers could collaborate with while planning and instructing ELLs. Even if the time or resources do not make coaching possible, having a person available that teachers can use as a resource was an important aspect of this study and is consistent with other research, "Many of the participants recognized that supporting ELLs is not something they can do on their own, and that there is a need for some kind of collaborative effort between them and other ESL support personnel" (Hadjioannou et al., 2016, p. 24). Another essential portion of the PD that may not be as obvious as providing participants with specific strategies, was building teacher-participants' background knowledge of language acquisition. Villegas et al. (2018) noted that to be linguistically responsive to ELLs, mainstream teachers need some knowledge of second language development.

Future Research

Future research as an outcome of this study would involve implementation of the PD intervention on sheltered instruction and culturally responsive teaching by individuals at other

sites to provide multiple cases for assessing its effectiveness. Providing teachers with the knowledge and strategies to meet the needs of an increasing culturally and linguistically diverse population will build capacity in practitioners and impact student outcomes. The needs of each school, however, can be different; especially considering that the host district for this study maintains magnet schools with different themes that are infused in their curricula. The school that served as a site for this study had a Montessori theme, therefore the researcher-presenter had to discuss how the elements of that theme interact and support the components of sheltered instruction and elements of culturally relevant teaching as part of the PD. Other schools in the district include themes such as the arts, STEM, and public safety. Thus, there is coursework that is unique to those schools and would require adaptation of the PD for those particular teachers to apply it. Follow-up research could determine any additional elements of PD planning that should be implemented in those settings.

References

- Alanis, I., and Rodriguez, N. (2008). Sustaining a dual language immersion program: Features of success. *Journal of Latinos in Education*, 7(4), 305-319.
- Baker, C. (2006). *Foundations of bilingual education and bilingualism* (4th Ed.). Bristol: Multilingual Matters.
- Ball, D. L., Thames, M. H., & Phelps, G. (2008). Content knowledge for teaching: What makes it special? *Journal of Teacher Education*. 59, 389-407.
- Ballantyne, K. G., Sanderman, A. R., & Levy, J. (2008). Educating English language learners: Building teacher capacity. Washington, DC: National Clearinghouse for English Language Acquisition.
- Batt, E. G. (2010). Cognitive coaching: A critical phase in professional development to implement sheltered instruction. *Teaching and Teacher Education*, 26, 997-1005.
- Cartledge, G., & Kourea, L. (2008). Culturally Responsive Classrooms for Culturally Diverse Students with and at Risk for Disabilities. *Council for Exceptional Children*, 74(3), 351-371.
- Charmaz, K. (2014). *Constructing grounded theory* (2nd ed., Kindle ed.). Los Angeles: Sage.
- Chen, W.B., and Gregory, A. (2011). Parental involvement in the prereferral process: Implications for schools. *Remedial and Special Education*, 32(6), 447-457.
- Collins, K. M. T. (2010). Advanced sampling designs in mixed research. Current practices and emerging trends in the social and behavioral sciences. In C. Teddlie & A. Tashakkori (Eds.), *Handbook of Mixed Methods Research*. 2nd ed. Thousand Oaks, CA: Sage
- Cortina, R., Makar, C., & Mount-Cors, M. F. (2015). Dual language as a social issue: Putting languages on a level playing field. *Current Issues in Comparative Education*, 17(1), 5-16.

- de Jong, E., Naranjo, C., & Ouzia, A. (2018). Beyond Compliance: ESL Faculty's Perspectives on Preparing General Education Faculty for ESL Infusion. *Educational Forum*, 82(2), 174-190.
- Dellicarpini, M., & Alonso, O. (2013). Working with English Language Learners- Looking back and moving forward. *English journal*, 102 (5), 91-93.
- Denham, K. E., & Lobeck, A. C. (2005). *Language in the schools: Integrating linguistic knowledge into K-12 teaching*. Mahwah, N.J: L. Erlbaum Associates.
- Denscombe, M. (2014). *The good research guide: for small-scale social research projects* (5th ed.). New York: Open University Press.
- Echevarría, J., Vogt, M., Short, D.J. (2010). *Making content comprehensible for secondary English learners: The SIOP model*. Boston: Allyn & Bacon.
- Fan, W., Williams, C. M., & Wolters, C. A. (2012). Parental Involvement in Predicting School Motivation: Similar and Differential Effects Across Ethnic Groups. *The Journal of Educational Research*, 105, 21–35.
- Ferrara, M. M. (2009). Broadening the myopic vision of parent involvement. *The school community journal*, 19 (2), 123-142.
- Fink, A. G. (2014). *Conducting research literature reviews: from the internet to paper* (4th ed.). Los Angeles: Sage.
- Froman, L. (1994). Adult learning in the workplace. In J. Sinnott (Ed.), *Interdisciplinary handbook of adult lifespan learning* (pp. 158-170). London, UK: Greenwood.
- Gass, S.M. (1997). *Input, interaction, and the second language learner*. Mahwah, NJ: Lawrence Erlbaum Associates.

- Halliday, M.A.K. (2003). On the "architecture" of human language. In J. Webster (Ed.) *On Language and Linguistics* (Vol. 3). London and New York: Continuum.
- Henderson, A. T., and Mapp, K. L. (2002). *A New Wave of Evidence: The Impact of School, Family, and Community Connections on Student Achievement*. Austin, TX: Southwest Educational Development Laboratory.
- Hendricks, C. (2013). *Through Action Research: A Reflective Practice Approach*, Third Edition. Pearson Publishing.
- Huntsinger, C., and Jose, P. (2009). Parental involvement in children's schooling: Different meanings in different cultures. *Early Childhood Research Quarterly*, 24, 398-410.
- Hadjioannou, X., Hutchinson, M. C., & Hockman, M. (2016). Addressing the Needs of 21st-Century Teachers Working With Culturally and Linguistically Diverse Learners. *CATESOL Journal*, 28(2), 1-29.
- Jesson, J, Matheson, L. and Lacey, F. (2011). *Doing your literature review: Traditional and systemic techniques* (Kindle ed.). London: Sage.
- Kandel, B.E. (2009). *Improving Teaching and Learning for English Language Learners* (Unpublished doctoral dissertation). Texas A&M University.
- Kim (2009). Minority parental involvement and barriers: Moving the focus away from deficiencies of parents. *Educational Research Review*, 4, 80-102.
- Krashen, S. D. (1987) *Principles and practice in second language acquisition*. New York, NY: Pergamon Press.
- Krashen, S.D., & Terrell, T.D. (1983). *The Natural Approach: Language Acquisition in the Classroom*. San Francisco, The Alemany Press.

- Kugman, J., Lee, J. C., & Nelson, S. (2012). School co-ethnicity and Hispanic parental involvement. *Social Science Research, 41*, 1320-1337.
- Lee, O., Deaktor, R., Enders, C., & Lambert, J. (2008). Impact of a multi-year profesional development intervention on science achievement of culturally and linguistically diverse elementary students. *Journal of Research in Science Teaching, 45*(6), 726-747.
- Levine, E. (1999). Familias Latinas: Participando en la educación de sus hijos (Latino Families: Getting Involved in Your Children's Education). *Early Childhood Digest*. Harvard Family Research Project, Cambridge, MA.
- Lincoln Y. & Guba E. (1985) *Naturalistic Inquiry*. Newbury Park: Sage.
- Lucas, T. & Villegas, A. M. (2010). The missing piece in teacher education: The preparation of linguistically responsive teachers. *Yearbook of the National Society for the Study of Education 109*(2), 297-318.
- Maxwell, J.A. (2013). *Qualitative research design: An interactive approach*. Thousand Oaks: Sage.
- Mendez, L. I., Crais, E. R., Castro, D.C., & Kainz, K. (2015). A culturally and linguistically responsive vocabulary approach for young Latino dual language learners. *Journal of Speech, Language, and Hearing Research, 58*, 93-106.
- Mertler, C., (2014). *Action Research: Improving schools and empowering educators* (4th ed.). London: Sage.
- Neuman, W. L. (2006). *Social Research Methods: Qualitative and Quantitative Approaches* (6th ed.). The University of Michigan: Pearson.
- Norton, L. (2009). *Action Research in Teaching & Learning*. Routledge Publishing.

- Patton, M. Q. (1999) Enhancing the Quality and Credibility of Qualitative Analysis. *Health Services Research* 34(5).
- Patton, M.Q. (2014). *Qualitative Research and Evaluation Methods* (4th ed.). Los Angeles: Sage.
- Penuel, W. R., Gallagher, L. P., & Moorthy, S. (2011). Preparing teachers to design sequences of instruction in earth science: A comparison of three professional development programs. *American Educational Research Journal*, 48(4), 996-1025.
- Reynolds, G. (2008). Presentation Zen: Simple Ideas on Presentation Design and Delivery. Berkeley, CA: New Riders Press.
- Rolstad, K., Mahoney, K., & Glass, G. V. (2005). The big picture: A meta-analysis of program effectiveness research on English language learners. *Educational Policy*, 19(4), 572-594.
- Ross, K. (2014). Professional development for practicing mathematics teachers: A critical connection to English language learner students in mainstream USA classrooms. *Journal of Mathematics Teacher Education*, 17(1), 85-100.
- Ruiz, A. M. (2011). *Teachers and English language learners experiencing the secondary mainstream classroom: A case study* (Unpublished doctoral dissertation). Georgia State University.
- Saldaña, J. (2013). *The coding manual for qualitative researchers*. Thousand Oaks, CA: Sage.
- Savage, C., Hindle, R., Meyer, L. H., Hynds, A., Penetito, W., & Sleeter, C. E. (2011). Culturally responsive pedagogies in the classroom: indigenous student experiences across the curriculum. *Asia-Pacific Journal Of Teacher Education*, 39(3), 183-198.
- Schechter, S.R., and Cummins, J. (2003). Multilingual education in practice. Portsmouth, NH: Heinemann.

- Schleppegrell, M. (2012). Academic language in teaching and learning: Introduction to the special issue. *The Elementary School Journal*, 112(3), 409-418.
- Schleppegrell, M.J., & O'Hallaron, C.L. (2011). Teaching academic language in L2 secondary settings. *Annual Review of Applied Linguistics*, 31, 3-18.
- Spycher, P. (2009). Learning Academic language through science in two linguistically diverse kindergarten classes. *Elementary School Journal*, 109(4), 359-379.
- Szafran, R. F. (2012). *Answering Questions with Statistics*. Thousand Oaks, CA: Sage.
- Teel, K. M., & Obidah, J. E. (2008). *Building Racial and Cultural Competence in the Classroom: Strategies from Urban Educators*. New York, NY: Teachers College Press.
- Teemant, A., Wink, J., & Tyra, S. (2011). Effects of coaching on teacher use of sociocultural instructional practices. *Teaching and Teacher Education*, 27, 683-693.
- U.S. Department of Education, National Center for Education Statistics. (2017). *The condition of education*. Retrieved from https://nces.ed.gov/programs/coe/indicator_cgf.asp
- Villegas, A. M., & Lucas, T. (2002a). *Educating culturally responsive teachers: A coherent approach*. Albany, NY: SUNY Press.
- Villegas, A. M., SaizdeLaMora, K., Martin, A. D., & Mills, T. (2018). Preparing Future Mainstream Teachers to Teach English Language Learners: A Review of the Empirical Literature. *Educational Forum*, 82(2), 138-155.
- Vogt, F., & Rogalla, M. (2009). Developing adaptive teacher competency through coaching. *Teaching and Teacher Education*, 25, 1051-1060.
- Wang, M., & Sheikh-Khalil, S. (2014). Does parental involvement matter for student achievement and mental health in high school? *Child Development*, 85(2), 610-625.

Xu, M. A., & Storr, G. B. (2012). Learning the concept of the researcher as instrument in qualitative research. *Qualitative Report*, 42(17), 1-18.

Zwiers, J. (2005). The third language of academic English. *Educational Leadership*, December 2004/January 2005, 60-63.

Appendix A

Pre-PD Survey:

As many of you know, I, Violet Sims, am a doctoral student in the University of Bridgeport's Educational Leadership program. The purpose of this survey is to gather your perceptions in order to inform future professional development.

Please note: Your participation in this survey is completely voluntary. You may opt out by simply not completing the survey. The results of this short survey will be utilized in a study titled PROFESSIONAL DEVELOPMENT FOR CULTURALLY AND LINGUISTICALLY RESPONSIVE CLASSROOMS: A CASE STUDY, without reporting identifying/personal information. If at any point after this survey you have any questions/concerns, please feel free to email me at vsims@my.bridgeport.edu.

Describe your knowledge of/involvement with English language learners (ELLs).

Novice _____ Some _____ Expert _____

Do you have ELLs in your classroom?

Yes _____ No _____ I Don't Know _____

Do you have students from non-dominant cultures or who are heritage speakers of another language (not necessarily ELL) in your classroom? Yes _____ No _____ I Don't Know _____

What challenges do you believe we face in regard to educating English language learners?

What opportunities do you believe we have in regard to educating English language learners?

What would you like to know more about if presented with PD on addressing the needs of ELLs and/or culturally and linguistically diverse (CLD) students?

Please check the column with the response that corresponds with your opinion on each statement.

Question	Yes	Somewhat	No	Don't Know
Bilingualism and biliteracy are beneficial to all students.				
The most important purpose of bilingual education/ELL supports is to help students learn English.				
Our school is meeting the needs of English language learners.				
I know how to advocate on behalf of English language learners.				
My classroom environment is culturally inclusive.				
I deliver culturally responsive instruction in my classroom.				

Post-PD Survey:

As many of you know, I, Violet Sims, am a doctoral student in the University of Bridgeport's Educational Leadership program. The purpose of this survey is to gather your perceptions in order to inform future professional development.

Please note: Your participation in this survey is completely voluntary. You may opt out by simply not completing the survey. The results of this short survey will be utilized in a study titled PROFESSIONAL DEVELOPMENT FOR CULTURALLY AND LINGUISTICALLY RESPONSIVE CLASSROOMS: A CASE STUDY, without reporting identifying/personal information. If at any point after this survey you have any questions/concerns, please feel free to email me at vsims@my.bridgeport.edu.

Describe your knowledge of/involvement with ELLs.

Novice_____ Some_____ Expert_____

What are you taking away from today's PD?

Do you have unanswered questions? Yes_____ No_____

If yes, please specify the most pressing:

Would you like to receive additional PD or other support to help you meet the needs of culturally and linguistically diverse students? Yes_____ No_____

Please check the column with the response that corresponds with your opinion on each statement.

Question	Yes	Somewhat	No	Don't Know
Bilingualism and biliteracy are beneficial to all students.				
The most important purpose of bilingual education/ELL supports is to help students learn English.				
Our school is meeting the needs of English language learners.				
I know how to advocate on behalf of English language learners.				
I plan to make changes in my practice in order to ensure that my classroom environment is culturally inclusive.				
I plan to make changes in my practice in order to deliver culturally responsive instruction in my classroom.				

Appendix B

Observation Protocol

(Adapted from Echevarria, Vogt, & Short 2008; with elements from Schleppegrell & O'Hallaron 2011; Lucas & Villegas 2010; and Cartledge & Kourea 2008)

Observer: _____ Class: _____
Date: _____ Topic: _____
Time: _____ Grades: _____

Rate each component on a scale of 4 through 0 or NA if not applicable, as observed in the lesson

4= Highly Evident -----0= Not Evident

Lesson Preparation

Rating: 4 3 2 1 0 NA

1. Content objectives clearly defined, displayed, and reviewed with students _____
2. Language objectives clearly defined, displayed, and reviewed with students _____
3. Content concepts appropriate for age and educational background level of students _____
4. Supplementary materials used to a high degree, making the lesson clear and meaningful (e.g., computer programs, graphs, models, visuals) _____
5. Adaptation of content (e.g., text, assignment) to all levels of student proficiency _____
6. Meaningful activities that integrate lesson concepts (e.g., surveys, letter writing, simulations, constructing models) with language practice opportunities for reading, writing, listening, and/or speaking _____

Building Background

Rating: 4 3 2 1 0 NA

7. Concepts explicitly linked to students' background experiences _____
8. Links explicitly made between past learning and new concepts _____
9. Key vocabulary emphasized (e.g., introduced, written, repeated, and highlighted for students to see) _____

Comprehensible Input

Rating: 4 3 2 1 0 NA

10. Speech appropriate for students' proficiency level (e.g., slower rate, enunciation, and simple sentence structure for beginners) _____
11. Clear explanation of academic tasks _____
12. A variety of techniques used to make content concepts clear (e.g., modeling, visuals, hands-on activities, demonstrations, gestures, body language) _____

Interaction

Rating: 4 3 2 1 0 NA

13. Frequent opportunities for interaction and discussion between teacher/student and among students, which encourage elaborated responses about lesson concepts _____
14. Grouping configurations support language and content objectives of the lesson _____
15. Sufficient wait time for student responses consistently provided _____
16. Ample opportunities for students to clarify key concepts in L1 as needed with aide, peer, or L1 text _____

Culturally and Linguistically Responsive Classroom Elements

Rating: 4 3 2 1 0 NA

17. There is evidence that content is organized thematically _____
18. Academic language is explicitly being taught _____
19. High expectations are apparent _____
20. An atmosphere of trust and risk-taking has been established _____
21. Instruction is scaffolded to promote CLD student learning _____
22. Classrooms has high levels of pupil academic responding _____
23. Teacher is monitoring and providing feedback throughout lesson _____
24. Classroom is disciplined and fair _____
25. Proactive systems are in place _____
26. Social skills instruction is intertwined with content/lesson delivery _____
27. Student comprehension and learning of objectives are assessed _____

Total Points Earned (120 possible): _____

Percentage Score: _____

Comments:

Appendix C

Semi-structured interview:

Interviewer initial script:

My name is _____. As many of you know, Violet Sims is a doctoral student in the University of Bridgeport's Educational Leadership program. The purpose of this interview is to gather your perceptions in order to inform future professional development at this school.

Please note: Your participation in this interview is completely voluntary. You may opt out at any point, even if the interview has already begun. At this point you should have completed a consent form, if you have not, please let me know now. I have signed a confidentiality agreement that you are welcome to read (show participant the agreement), and will only be sharing the transcribed version of this interview with the researcher, ensuring to remove any identifiable information. Once I have transcribed the interview, I will delete the recording in order to maintain participant confidentiality.

The results and analysis of this short interview will be utilized in a study titled PROFESSIONAL DEVELOPMENT FOR CULTURALLY AND LINGUISTICALLY RESPONSIVE CLASSROOMS: A CASE STUDY, without reporting identifying/personal information. If at any point after this survey you have any questions/concerns, please feel free to email me at _____.

What did you think about the PD presented by the researcher, Violet Sims on January 10th or February 2nd, 2018?

How has attending the PD impacted your thinking in regard to English language learners and culturally diverse students?

How has attending the PD impacted your practice?

What feedback would you give the researcher/presenter in regard to the quality of the presentation content?

What feedback would you give the researcher/presenter in regard to the presentation delivery?

If there is anything else that you think will be helpful or important for the researcher to know, please feel free to share.

Thank you for your time. Please remember that if you have any questions or concerns you can contact me at any time. Also note that I am willing to meet with you again if you would like to see the transcribed interview before I share it with the researcher.

Appendix D

Pre Conference:

Welcome! I'm Violet Sims, a presenter at today's conference and a doctoral student in the University of Bridgeport's Educational Leadership program. The purpose of this survey is to gather perceptions of parents, teachers, and other adult participants in order to inform future conferences and professional development.

Please note: Your participation in this survey is completely voluntary. You may opt out by simply not completing the survey. The results of this short survey will be utilized in a study titled *Customizing professional development to meet the needs of English language learners*, without reporting identifying/personal information. The results will also be shared with conference organizers. If at any point after this conference you have any questions/concerns, please feel free to email the researcher at violetsims@yahoo.com.

Are you a:

Teacher _____ Parent _____ College professor _____ Other (specify) _____

Do you live/work in:

CT (optional district/city) _____ Other (please specify) _____

Describe your knowledge of/involvement with ELLs. Novice _____ Some _____ Expert _____

What challenges do you believe we face in regard to educating English language learners?

What opportunities do you believe we face in regard to educating English language learners?

What do you hope to get out of today's conference?

Please check the column with the response that corresponds with your opinion on each statement.

Question	Yes	Somewhat	No	Don't Know
Bilingualism and biliteracy are beneficial to all students.				
The most important purpose of bilingual education/ELL supports is to help students learn English.				
School districts in my state are meeting the needs of English language learners.				
There are sufficient dual language programs in my state.				
I know how to advocate on behalf of English language learners.				

Post Conference:

Welcome! I'm Violet Sims, a presenter at today's conference and a doctoral student in the University of Bridgeport's Educational Leadership program. The purpose of this survey is to gather perceptions of parents, teachers, and other adult participants in order to inform future conferences and professional development.

Please note: Your participation in this survey is completely voluntary. You may opt out by simply not completing the survey. The results of this short survey will be utilized in a study titled *Customizing professional development to meet the needs of English language learners*, without reporting identifying/personal information. The results will also be shared with conference organizers. If at any point after this conference you have any questions/concerns, please feel free to email the researcher at violetsims@yahoo.com.

Are you a:

Teacher _____ Parent _____ College professor _____ Other (specify) _____

Do you live/work in:

CT (optional district/city) _____ Other (please specify) _____

Describe your knowledge of/involvement with ELLs. Novice _____ Some _____ Expert _____

What are you taking away from today's conference?

Do you have unanswered questions? Yes _____ No _____

If yes, please specify:

Please check the column with the response that corresponds with your opinion on each statement.

Question	Yes	Somewhat	No	Don't Know
Bilingualism and biliteracy are beneficial to all students.				
The most important purpose of bilingual education/ELL supports is to help students learn English.				
School districts in my state are meeting the needs of English language learners.				
There are sufficient dual language programs in my state.				
I know how to advocate on behalf of English language learners.				

Appendix E

INTERVIEWER CONFIDENTIALITY AGREEMENT

I, [name], agree to conduct participant interviews in order to ensure that the participants feel comfortable giving honest feedback to the researcher-presenter and so that the participants are assured their identities will be protected. I agree that I will:

1. Keep all research information shared with me confidential by not discussing or sharing the information in any form or format (e.g., verbal, transcripts) with anyone other than sharing transcripts with Violet Sims, the researcher on this study;
2. Keep all research information in any form or format secure while it is in my possession. This includes:
 - keeping any printed transcripts in a secure location such as a locked file cabinet during the time that I have the transcript to review with the participant; and
3. Delete/shred all research information in any form or format (e.g., digital recordings, transcripts) when I have completed the research tasks and provided the researcher with transcripts.

Signature of Interviewer

Date

Print name

Signature of principal investigator

Date

Print name

Appendix F

First Iteration Observation Feedback for Participants

Sheltered Instruction and Culturally Responsive Classrooms Guide

(Adapted from Echevarria, Vogt, & Short 2008; with elements from Schleppegrell & O'Hallaron 2011; Lucas & Villegas 2010; and Cartledge & Kourea 2008)

Lesson Preparation

1. Content objectives clearly defined, displayed, and reviewed with students
2. Language objectives clearly defined, displayed, and reviewed with students
3. Content concepts appropriate for age and educational background level of students
4. Supplementary materials used to a high degree, making the lesson clear and meaningful (e.g., computer programs, graphs, models, visuals)
5. Adaptation of content (e.g., text, assignment) to all levels of student proficiency
6. Meaningful activities that integrate lesson concepts (e.g., surveys, letter writing, simulations, constructing models) with language practice opportunities for reading, writing, listening, and/or speaking

Building Background

7. Concepts explicitly linked to students' background experiences
8. Links explicitly made between past learning and new concepts
9. Key vocabulary emphasized (e.g., introduced, written, repeated, and highlighted for students to see)

Comprehensible Input

10. Speech appropriate for students' proficiency level (e.g., slower rate, enunciation, and simple sentence structure for beginners)
11. Clear explanation of academic tasks
12. A variety of techniques used to make content concepts clear (e.g., modeling, visuals, hands-on activities, demonstrations, gestures, body language)

Interaction

13. Frequent opportunities for interaction and discussion between teacher/student and among students, which encourage elaborated responses about lesson concepts
14. Grouping configurations support language and content objectives of the lesson
15. Sufficient wait time for student responses consistently provided

16. Ample opportunities for students to clarify key concepts in L1 as needed with aide, peer, or L1 text

Culturally and Linguistically Responsive Classroom Elements

- 17. There is evidence that content is organized thematically
- 18. Academic language is explicitly being taught
- 19. High expectations are apparent
- 20. An atmosphere of trust and risk-taking has been established
- 21. Instruction is scaffolded to promote CLD student learning
- 22. Classrooms has high levels of pupil academic responding
- 23. Teacher is monitoring and providing feedback throughout lesson
- 24. Classroom is disciplined and fair
- 25. Proactive systems are in place
- 26. Social skills instruction is intertwined with content/lesson delivery
- 27. Student comprehension and learning of objectives are assessed

Appendix G

Second Iteration Observation Feedback for Participants

Sheltered Instruction and Culturally Responsive Classrooms Guide

(Adapted from Echevarria, Vogt, & Short 2008; with elements from Schleppegrell & O'Hallaron 2011; Lucas & Villegas 2010; and Cartledge & Kourea 2008)

Lesson Preparation

1. Content objectives clearly defined, displayed, and reviewed with students
2. Language objectives clearly defined, displayed, and reviewed with students
3. Content concepts appropriate for age and educational background level of students
4. Supplementary materials used to a high degree, making the lesson clear and meaningful (e.g., computer programs, graphs, models, visuals)
5. Adaptation of content (e.g., text, assignment) to all levels of student proficiency
6. Meaningful activities that integrate lesson concepts (e.g., surveys, letter writing, simulations, constructing models) with language practice opportunities for reading, writing, listening, and/or speaking

Building Background

7. Concepts explicitly linked to students' background experiences
8. Links explicitly made between past learning and new concepts
9. Key vocabulary emphasized (e.g., introduced, written, repeated, and highlighted for students to see)

Comprehensible Input

10. Speech appropriate for students' proficiency level (e.g., slower rate, enunciation, and simple sentence structure for beginners)
11. Clear explanation of academic tasks
12. A variety of techniques used to make content concepts clear (e.g., modeling, visuals, hands-on activities, demonstrations, gestures, body language)

Interaction

13. Frequent opportunities for interaction and discussion between teacher/student and among students, which encourage elaborated responses about lesson concepts
14. Grouping configurations support language and content objectives of the lesson
15. Sufficient wait time for student responses consistently provided

16. Ample opportunities for students to clarify key concepts in L1 as needed with aide, peer, or L1 text

Culturally and Linguistically Responsive Classroom Elements

17. There is evidence that content is organized thematically

18. Academic language is explicitly being taught

19. High expectations are apparent

20. An atmosphere of trust and risk-taking has been established

21. Instruction is scaffolded to promote CLD student learning

22. Classrooms has high levels of pupil academic responding

23. Teacher is monitoring and providing feedback throughout lesson

24. Classroom is disciplined and fair

25. Proactive systems are in place

26. Social skills instruction is intertwined with content/lesson delivery

27. Student comprehension and learning of objectives are assessed

Appendix H

Table 6 Pre-PD Open-ended Responses

	What challenges do you believe we face in regard to educating English language learners?	What opportunities do you believe we have in regard to educating English language learners?	What would you like to know more about if presented with PD on addressing the needs of ELLs and/or culturally and linguistically diverse (CLD) students?
<i>Participant #1</i>	Classroom teachers and support staff may not have (enough) tools to meet these students' needs.	We have opportunities to collaborate with ELL teachers, parents, and students to learn helpful strategies and approaches to teach EL learners.	A few ways (tools for the toolbox) on how to approach these students with reading (i.e. instructions, word problems, etc.)
<i>Participant #2</i>	Not taking the time to learn. Knowing multiple languages is amazing. I wish my Spanish was better and that I was comfortable enough to speak it among Spanish-speakers.	I don't know.	I want to better my Spanish and feel comfortable. Other than that, no idea.
<i>Participant #3</i>	Challenges include teaching them reading, especially higher level comprehension because they don't always have the vocabulary. Teaching them math concepts that involve a lot of language can also be difficult.	We have the opportunity to learn about another culture and language. It is important to teach ELL learners that they are lucky they can speak more than one language. They can teach us about their language and culture. This would be an opportunity for other students to learn as well.	I would like to learn about best teaching practices for these students so that they can be successful.

<i>Participant #4</i>	Not always sure the best strategies to use based on their language strengths or deficits.	Having staff who could possibly train us.	Key strategies for supporting them.
<i>Participant #5</i>	The disconnect with parents that speak a different language, communicating with teachers and understanding what services are available to their children.	We have a lot of resources available and can incorporate their language into instruction.	Understanding what about English is not part of their natural language.
<i>Participant #6</i>	Language spoken at home and parents not knowing English	Most students are eager to learn	How to get parents invested in speaking English at home with their children
<i>Participant #7</i>	Reading sounds in English not found in their home language, processing academic language, cultural differences socially	Unique prior knowledge to add to conversation in classroom, incentive to include work with texts that reference more cultures	Academic challenges of ELL students
<i>Participant #8</i>	Making sure people are mindful of best ways to help ELL students learn and then do [practice] them. Montessori materials can help facilitate this.	I'm not sure what this means.	I'm open to anything.
<i>Participant #9</i>	It affects every subject, yet they're held to the same standards and same assessments. Even once they're exited [from ELL services/programs], it still impacts their understanding of oral and written language in any subject.	X	X

Appendix I

Table 11 Pre-Intervention Observation 1 Scores

Component #	Participant 1	Participant 2	Participant 3	Participant 4
1	3	3	3	1
2	0	1	0	0
3	4	4	4	3
4	4	4	3	3
5	2	2	2	2
6	3	3	3	2
7	2	2	2	1
8	4	4	3	2
9	2	3	3	1
10	2	3	3	2
11	3	3	3	3
12	3	3	3	3
13	2	3	3	2
14	3	3	3	2
15	3	4	3	3
16	0	0	0	0
17	2	4	2	2
18	3	3	2	2
19	3	4	3	3
20	3	4	2	2
21	2	3	3	2
22	2	3	2	2
23	3	2	3	2
24	3	4	3	3
25	4	4	3	3
26	4	3	3	3
27	2	2	3	1
Total Score	71	81	70	55
Percentage Score (mean)	65.74%	75.00%	64.81%	50.93%

Appendix J

Table 12 Post-Intervention Observation 1 Scores

Component #	Participant 1	Participant 2	Participant 3	Participant 4
1	3	3	3	2
2	3	2	2	2
3	4	4	4	3
4	4	4	3	3
5	2	2	2	2
6	3	3	3	2
7	3	3	2	2
8	4	4	3	2
9	2	3	3	2
10	2	3	3	2
11	3	3	3	3
12	3	3	3	3
13	2	3	3	2
14	3	3	3	2
15	3	4	3	3
16	0	0	0	0
17	2	4	2	2
18	3	3	2	2
19	3	4	3	3
20	3	4	3	2
21	3	3	3	3
22	2	3	2	2
23	3	2	3	2
24	3	4	3	3
25	4	4	3	3
26	4	3	3	3
27	2	2	3	2
Total Score	76	83	73	62
Percentage Score (mean)	70.37%	76.85%	67.59%	57.41%

Appendix K

Table 13 Initial Themes

Theme
<i>1. Workshop Length</i>
<i>2. Continuous PD</i>
<i>3. Number of Workshops</i>
<i>4. Processing Time</i>
<i>5. Collaboration Time</i>
<i>6. Content Specific</i>
<i>7. Grade Specific</i>
<i>8. Practical Hand-outs</i>
<i>9. Useful Resources</i>
<i>10. Personal Feedback for Participants</i>
<i>11. Humor in Presentation</i>
<i>12. Humorous Illustrations</i>
<i>13. Opportunities for Questions</i>
<i>14. Presenter Organization</i>
<i>15. Workshop Organized</i>
<i>16. Presenter Preparation</i>
<i>17. Presenter Reliability</i>
<i>18. Personal Connection</i>
<i>19. Engagement</i>
<i>20. Strategies</i>
<i>21. Heightened Awareness</i>

<i>22. Better Understanding</i>
<i>23. Resource Accessibility</i>
<i>24. User-Friendly Materials</i>
<i>25. Vocabulary Building</i>
<i>26. Supporting Student Skills</i>

Appendix L

Table 16 Examples of Themes

Category	Theme
<i>Time and Frequency</i>	<i>Workshop Length</i>
Examples: <p>“I probably could have used like double the time.”</p> <p>“It could have been longer.”</p> <p>“I needed kind of a longer time to unpack some of that...”</p> <p>“I think a longer time would have been good.”</p> <p>“I think she did really well in giving us some valuable information. So much so that I think all of us in the room could have stayed another hour or more.”</p> <p>“I would ask or request for more time for training like that because it was so good.”</p> <p>“I think if she even had one more (illustrative activity) it might have, maybe toward the end, added as a highlight so you walk out feeling like, ‘oh, I’ve got to do something about this’.”</p>	
<i>Time and Frequency</i>	<i>Number of Workshops</i>
<p>“If we could have quite a few more like that, modules over time, that would be really helpful also.”</p> <p>“I still have so much to learn, so at this point I’m just an empty vessel, just taking it all in. So, I would have to go through at least three more modules...”</p>	
<i>Time and Frequency</i>	<i>Processing/Collaboration Time</i>
Examples: <p>“It was a lot of useful information, but a lot to take in all at once.”</p> <p>“I was thinking about 45 minutes in I was starting to sort of glaze over, and I thought this would be a great time for some kind of break where we actually do an activity.”</p> <p>“I think some activities between, and some processing time, and some more conversation and discussion between.”</p> <p>“It would be really good if ---- could come up with some scenarios and we could work together as a team or group on how, how we could support a particular student in that scenario.”</p>	

<p>“...working together we can definitely see what strategies would work and then with ---- being there to kind of help us out, you know, how to improve a strategy, or something like that. That would be really helpful.”</p>	
<i>Workshop Components</i>	<i>Content/Grade Specific</i>
<p>Examples:</p> <p>“She did have something for me, for (subject), which I think was really important and it made me cognizant that she must have looked at the audience ahead of time enough to know that I was in it, because that was directed towards me.”</p> <p>“That would be one thing that I would say for anyone presenting. If you find something, one thing that pertains directly to your special groupings you are presenting to, you, right away have shown them that you are trying to make the effort to connect in a meaningful way with what they may need for PD.”</p>	
<i>Workshop Components</i>	<i>Practical Hand-outs/Resources</i>
<p>Examples:</p> <p>“She gave us a lot of resources to leave with, too...”</p> <p>“She gave us a lot of printed paper, which she didn’t actually give us until later.”</p> <p>“The handouts were very helpful. Some of the handouts also had graphic organizers for students and that is always helpful with our students who need that extra support, even the ones that don’t.”</p> <p>“Number one, she handed out one of the handouts ’10 Ways to Support ELLs... or something, and that was helpful. It wasn’t written by her, it was a hand-out she gathered from other materials and several of the things in there were pertinent to me.”</p> <p>“It was a fairly comprehensive document without being overwhelming. I mean (not) the type of document that someone gets in a handout and puts away on a shelf and never use it, because we’ve all gotten those types of things that become too large to actually practically use. So this was small enough that I could sit down and read it and to feel comfortable with it and understand it. And yet it had enough depth that it provided some value.”</p> <p>“I like that she had a whole bunch of different types of graphic organizers.”</p> <p>“She gave handouts which was great, and that’s even better than someone who just puts up, ‘here, write down these links’.”</p> <p>“The handouts and material she provided were great. I actually kept an extra copy.”</p>	

<p>“She had some really great points that she brought out in the handouts and in our printing of lessons... she gave us a sheet to use with the kids as far as planning from their perspective.”</p>	
<i>Workshop Components</i>	<i>Personal Feedback for Participants</i>
<p>Examples:</p> <p>“It was good to know what we as a school are doing right. She gave us a printout of what we’re already doing in meeting students’ needs and what she saw that we are working on and what we definitely need to work on.”</p> <p>“Definitely what stuck out to me was kind of her feedback that’s always good because sometimes in PDs you’re told what we need to do or what we’re not doing correctly and it was really refreshing to see that we were really – a lot of what we were doing – we are really meeting the needs of the kids.”</p> <p>“One thing I really thought she did a great job was that she made all of the attendees feel like, okay, you know, you’re doing a great job. You’re doing a lot of this, she showed that, so it wasn’t like you’re not doing this every day.”</p> <p>“I think she was very positive to the attendees and commended us for working hard every day.”</p>	
<i>Workshop Components</i>	<i>Humorous Illustrations</i>
<p>Examples:</p> <p>“She used a recording that was cute, it was an I love Lucy...it was a recording of the TV show. The idea of using that and showing how different words and sounds and everything, it did bring things home.”</p> <p>“I wasn’t thinking of it from the perspective of that foreign listener, or that foreign learner, and so I think that Ricky Ricardo thing was good.”</p> <p>“She showed a video that was very funny, it was an I Love Lucy thing, and it was just very interesting. It was very true to the English language, how others take the English language, and how difficult the English language is.”</p>	
<i>Workshop Components</i>	<i>Opportunities for Questions</i>
<p>Examples:</p> <p>“She allowed enough time for questions, and she will explain how someone would use a method or why that method or approach would be helpful to either the students or the students’ parents in some cases.”</p> <p>“She gave us opportunities to ask questions.”</p>	

“I felt comfortable asking questions.”	
<i>Participant Perceptions</i>	<i>Organization/Preparation</i>
Examples: “It was excellent. It was well-needed.” “She really, I really felt like a student, she started from the bottom and built us up with the information she was giving to us. I was able to picture myself in the classroom with the kids that she’s talking about, you know what I mean? It was clear and concise in that kind of way.” “It was interesting, it was fast-moving so it didn’t drag on, and she was very concise.” “She gave the material, she gave us the opportunities to ask questions, and she did everything within the time frame that was scheduled.” “I thought she did an outstanding job. She had the PowerPoint, but I felt like she knew exactly what she was talking about. She wasn’t referring to notes, and she wasn’t referring so much to the PowerPoint...”	
<i>Participant Perceptions</i>	<i>Relatability/Personal Connection</i>
Examples: “I thought it was very helpful.” “She gave an introduction to her background and why the subject area was particularly of interest and important to her, a little about her background.” “It was clear, she had some humor in it, she had personal comments that made you both aware of her connection to the subject matter and that it was important to her.” “I probably should mention also that she was warm in her presentation, but still professional. And she did make people, right away, she made it a point to say something like, ‘you’re free to say whatever you want, I’m not doing this, nor am I asking you to be here because I’m the Vice Principal’.” “I think that personal connection did come across and I think that is very valuable in terms of anyone giving PD because if you don’t make a connection with your audience first, probably nothing else is going to work very well.”	
<i>Participant Perceptions</i>	<i>Engagement</i>
Examples: “It kept everyone that I was able to see interested. People maintained involvement, there wasn’t long, drawn out pauses when a question was posed by the presenter.”	

<p>“I would say overall it was valuable and it helped me. It appeared when I looked at others to be something that kept other people interested and focused.”</p>	
<i>New Understandings</i>	<i>Strategies</i>
<p>Examples:</p> <p>“She talked about the integration model and how isolating our English language speakers (pause) how it would be beneficial to also have kids who are native English speakers also work with students who are not native speakers when we’re doing specific types of work in the classroom.”</p> <p>“There was a set of strategies, a listing of strategies, that she handed out that sort of talked about how one could better interact with ELLs in terms of helping them... it was broken down in terms of listening, speaking, writing, and reading.”</p>	
<i>New Understandings</i>	<i>Heightened Awareness</i>
<p>Examples:</p> <p>“There’s definitely some things that I’ve just become more aware of, that I, I need to do more for EL students and even just for all students.”</p> <p>“I think it’s, it just helps me gain an awareness of kind of very, very unique needs that they, across every subject and you know going to different groups and different lessons that are outside of the classroom and inside the classroom.”</p> <p>“As long as I have been working in schools, I still get ESL and other English language programs mixed up. So, she was able to give us specifics on what our children do with each different intervention.”</p> <p>“As far as planning work, especially anything with say word problems, That I’m more mindful of the challenges that kids have in working with word problems.”</p> <p>“I’m aware with more knowledge and education behind, and you know, what we do here and how we provide services to these learners. I’m just more mindful, more aware.”</p> <p>“I pay attention to the challenges that they’re having in my groups for sure.”</p> <p>“We don’t always know certain information about children and things they are confused by that we are not aware of. So, we have to be all the more alert and on top of it so that we’re not missing the boat so-to-speak.”</p> <p>“It made me more awareness of the difference between ESOL and ELL. She brought home the points for us on how we have to be more aware not only of the students, but of the families and the parents.”</p>	

“It’s made me more aware in my lessons and my planning and being aware of the students, their culture, their background, and – obviously – you know, every child is not coming from the same starting point.”

“For instance, right now, the students are doing a project... some kids would have probably more help on that project based on their families and their parents and so, it’s made me more aware for the next time how much more they are going to have to do in class versus at home.”

“(She) gave us a different perspective... you’re working really hard... here’s another way of looking at it and here’s another way of adding to what you’re doing.”

New Understandings

Resource Accessibility

Examples:

“There were a lot of things that I could take away that I could start using right away in my classroom.”

“Things I may have been familiar with but maybe not right at the forefront of my practice at this point may have been brought back in greater clarity. It’s probably more likely that faced with a student who’s ELL or faced with a situation where a child is having difficulty or needs extra help or support, I will have more tools that are more readily available.”

“Having the paperwork to go with it means if I get to a point where I go, ‘what should I do with this person?’ I have a place to start, and secondly, I’ve got a person to go and follow up with should I need to.”

New Understandings

Vocabulary Building

Examples:

“How I pan their work. I’ve been a little bit more mindful of that, in the verbiage that I use.”

“And not so much that you take out the rigor, but you just make the language more accessible to the student so that is definitely the first takeaway and the first thing I started to do in the classroom.”

“I noticed that one of my kids who’s an EL just reading an equation the other day, just how challenging it was for him just saying plus and equals, those are not numbers right? So I had to kind of slow him down and say, ‘you know plus, that means to add’ which is another thing that they have to figure out and then equals, what does that really mean? So, yeah, I mean vocabulary is huge at this point now...”

Appendix M

Table 20 Initial Themes 2

Theme
<i>1. English Difficulty</i>
<i>2. Importance of Home Language (L1)</i>
<i>3. Importance of Students' Culture</i>
<i>4. Benefits of Bilingualism</i>
<i>5. Presentation Delivery</i>
<i>6. Informative Presentation</i>
<i>7. Interesting</i>
<i>8. Tailored to Meet Participant Needs</i>
<i>9. Grade/Team Specific</i>
<i>10. Useful Information</i>
<i>11. Easy to Use Resources</i>
<i>12. Applicability</i>
<i>13. Relevant Feedback</i>
<i>14. Participants Able to Ask Questions</i>
<i>15. Presenter Answered Questions/Expanded</i>
<i>16. Good Resources</i>
<i>17. Useful Plan for Units/Lessons</i>
<i>18. Presenter Relatable</i>
<i>19. Helpful Materials</i>
<i>20. Motivating</i>
<i>21. Can Use Right Away</i>

Appendix N

Table 21 Examples of Themes 2

Category	Theme
<i>Language</i>	<i>English Difficulty</i>
<p>Examples:</p> <p>“I didn’t even think about the challenges that those students had, so it brought it into light. Um, it was a little short clip that really brought it (difficulty of English language) to light.”</p> <p>“Just thinking about the English language and English language learners, trying to learn the English language and how complex it is.”</p> <p>“Some of the sounds that are in the English language, I was not aware of... there’s particular sounds that are not in Spanish. That was helpful for me as a learner.”</p> <p>“When working with students, offering them kind of a multisensory approach to learning the English language, offering them more visuals, content, you know, because they may not have that language background.”</p> <p>“Even if their families speak some English outside of the school, so much of that is more interpersonal communication skills, whereas so much of what is tested in schools are more of the academic language proficiency.”</p> <p>“It has made me more aware of giving wait time also, I’m not just thinking that because the student is taking time to respond to me it isn’t because the student doesn’t necessarily know what I’m talking about, but it’s more about a student translating or trying to find a way to make a connection so they can respond to me.”</p> <p>“I’m being able to understand how the testing and evaluation work, what the criteria is for ELL services, and how it takes a very long time for them to become proficient in English.”</p> <p>“It made me think a little bit more, when she mentioned that there are students that might speak the language but may not understand what it’s about, like just because the student is speaking... that doesn’t mean they understand what you’re saying.”</p> <p>“And then she brought examples, too, like she thought bathing suit was ‘baby suits’ because we don’t have the ‘th-’ sound in Spanish.”</p>	
<i>Language</i>	<i>Importance of Home Language (L1) and Culture</i>
<p>Examples:</p> <p>“The other thing is from a cultural perspective, I’m thinking about some of the culture of my students and their families and the concern for them for a loss of culture...”</p>	

<p>“During conferences, I will encourage EL families to read to their children even if it’s in their home language. Some have told me they didn’t read to their kids because they (parents) can’t read English, but now I can explain why it’s good for them to read in any language.”</p>	
<i>Language</i>	<i>Benefits of Bilingualism</i>
<p>Examples:</p> <p>“Also, offering more books in both Spanish and English, let’s say the Hungry Caterpillar... the children can look at those in both Spanish and English vocabulary and colors.”</p> <p>“For all my students, um, it’s an opportunity for them to learn another language as well.”</p> <p>“In my classroom I speak Spanish as well, since I myself came from a bilingual home. So I used that original knowledge, coming from my own home, and I like the fact that I was able to get more strategies to work with the students (bilingually).”</p>	
<i>Impact of Presentation</i>	<i>Presentation Delivery</i>
<p>Examples:</p> <p>“I attend a PD every year throughout the year and I actually truly did feel this one was especially informative. I feel like the information presented was well thought out.”</p> <p>“She was very well-versed in it. She knew what she was talking about. She had the personal experience.”</p> <p>“I really liked it because I never thought about it (language learning) from that perspective, she also had personal experience as well.”</p> <p>“I couldn’t think of any suggestions other than to have more time with it.”</p> <p>“It was excellent. It was, what I felt like was often I go to a PD and the, I feel like after the end of several hours that the content of the PD could’ve been summarized in a half hour and I felt like the opposite for this PD.”</p> <p>“So, as someone who didn’t know a lot coming into it, it was enough that I was able to get a better understanding, but it wasn’t overwhelming to the point where I was confused.”</p> <p>“She spoke very well about the topic. You can tell it’s something that she’s really passionate about, and her anecdotes about her own experiences really helped to emphasize a lot of the content. It gave really solid examples.”</p> <p>“She’s very dynamic. She’s very calm. She was well-versed. You could tell she was passionate about this topic and about ELL children.”</p>	
<i>Impact of Presentation</i>	<i>Tailored to Meet Participant Needs</i>

Examples:

“She had some strategies and she color-coded them based on things she’s seen, things that she saw sometimes, or not at all. So the red ones I knew to really work on.”

“Some of the language that I’m less familiar with was well presented and described in detail. The basic interpersonal communication skills and the CALP, the cognitive language.”

“I thought it was really beneficial. I had actually just been saying prior to the presentation that this one of the areas as a classroom teacher I don’t know a whole lot about.”

“I thought the presentation was formatted really well and I liked that there were supplements on paper that were specific to the grade level that I teach, and that would be useful to me in my classroom.”

“It helped me to broaden my perspective, thinking about families that are coming to my school and specifically how I could work with them differently.”

“I thought it was very relevant. I have four students in particular that are new to my classroom this year and are ELL students and, um, due to some of their ages, they’re not eligible for services yet. So what was helpful for me was putting in place some of the components of what was shared in the PD before the students are even eligible for services. So, I feel like I gained two years of support for these pre-school students before they enter an ELL program formally.

Impact of Presentation***Applicability*****Examples:**

“I felt that the PD could be used immediately in my classroom in my classroom with students that I have that are ELL students.”

“I’m putting up the objective on the board and also wording it in multiple different ways.”

“I was able to learn a lot and then apply it to my classroom immediately.”

“I’m just implementing the different strategies that she gave and some of the hand-outs. It’s helped some of my kids. I have a couple of kids in here that are ELL students, so I’ve seen a little bit of a difference with them as well.”

Impact of Presentation***Relevant Feedback*****Examples:**

“---- had the opportunity to observe in our classrooms in the building and, in a very concise way, she showed us in a color-coded format what she observed in our classrooms in regard to the sheltered instruction and culturally responsive classrooms. In terms of lesson preparation, building background...”

<p>“In particular I looked at those areas of orange and red (on the feedback version of observation protocol) and then thought about my own classroom and did I have evidence for a parent or for someone who may be observing in my classroom to see?”</p> <p>“There were some suggestions of how to incorporate different questioning techniques and ways to approach certain topics that I’m able to so specifically with the students that I have in my room.”</p>	
<i>Impact of Presentation</i>	<i>Questions Asked and Answered</i>
<p>Examples:</p> <p>“I felt like we had a lot of information, but we went through it very succinctly and the participants were able to ask questions and offer feedback.”</p> <p>“She obviously presented, but she did it in a dynamic way where we were offered the opportunity to ask questions and share experiences.”</p> <p>“What she presented, the questions that I had, she answered them and not necessarily because I asked those questions.”</p>	
<i>Teacher Learning</i>	<i>Maximizing Resources</i>
<p>Examples:</p> <p>“I’m offering my students, um, just like vocabulary cards with pictures, a context for lessons and experiences.”</p> <p>“I’m building a lot of vocabulary prior to teaching. You know, when it’s a more abstract concept, so they can have opportunities for background information.”</p> <p>“I have a couple of students in my classroom who are receiving less language support and when the EL teacher would ask what they can be working on and I wasn’t really sure how to answer that, but now I can see how I can better support that in the classroom through the content they’re already learning and it doesn’t have to be something totally separate.”</p> <p>“I’m able to communicate better with the English language teacher, which is really helpful.”</p>	
<i>Teacher Learning</i>	<i>Helpful Materials</i>
<p>Examples:</p> <p>“There’s a graphic organizer type thing and then she also gave us some other ideas like to put the objective on the board and things like that. So, I’ve taken all of her suggestions into account and have tried to implement them.”</p>	

“She also provided a packet of possible strategies that we can use to help them (students). I’ve used a couple of them.”

“I took notes that I can go back to as well as walking away with hand-outs after to refer back to. And I have been able to use them in my classroom.”

“I absolutely loved that at the end of the presentation, each of us were able to walk away with a box of multicultural crayons and I absolutely loved that... I actually was able to use those in my classroom right away.”

“She provided so many useful materials.”

“Reading is definitely a challenge for them, so now I can better support their language acquisition in that area, using techniques that she provided.”

“There was a lot of useful information handed out, and it was also easily accessible.”

“Usually we’ll get information that you have to read through and really comb through. Her was very thoughtful throughout and, in giving the definitions of what EL is about. So, I really liked that useful information and concise materials.”

“It was nice to get more strategies to help students improve and build upon their vocabulary.”

“The presentation had so much useful information and the materials made it easy to refer back to the strategies. It was good to have those supports to go back to.”

Appendix O

Violet Jiménez Sims
Culturally and Linguistically Responsive Classroom
Professional Development Plan

June 2018

© Copyright by Violet Jiménez Sims 2018

Introduction

The following is a research-based guide to preparing and delivering professional development (PD) for mainstream teachers of culturally and linguistically diverse (CLD) students and English language learners (ELLs). This guide has been developed based on several theoretical bases and practical research. The author has experience as a public school language teacher, administrator, and was an ELL student. The guide is designed to help district leaders understand and include the essential elements for PD when ensuring culturally and linguistically diverse classrooms is a priority.

First Steps

While introductory PD sessions can be general with the purpose of providing background when this topic has not generally been addressed in a school district, it is important to ensure that sessions/workshops are tailored to participant needs as much as possible. This will ensure that participants find the information useful, which will in turn make it more likely to be applied. Some of the elements the preparer/presenter should be aware of in order to appropriately differentiate sessions/workshops include varying levels of knowledge and experience, grade levels taught, content/subject taught, and the cultural and linguistic demographics of the school(s) participants work in. It is recommended that data coming directly from participants is collected via digital survey, as this is a quick and easy way to collect and sort information.

Essential Components

Effective Presentation Skills/Delivery

Good and Bad PD Traits

Hook

Background (terminology, demographics, theory/language acquisition stages)

Research-based Teaching Strategies (grade and subject specific)

Praise and Specific Areas in Need of Improvement

Opportunities to Gain Perspective

Opportunities for Discussion/Questions

Opportunity to Plan/Apply Strategies

Opportunities for Collaboration

Detailed Hand-outs/Resources for Reference, Ideas, and Examples

Point Persons for Follow-up/Resources

Homework/Specific Expectations that Knowledge will be Applied

Measures for Presenters/Administrators

Evaluate and Plan Future PD

Effective Presentation Skills/Delivery

The presenter's presentation/public speaking skills, knowledge of the topic, and zeal can influence how participants receive the content of professional development. Some tips for effective presentations include: show your passion – it should be apparent that you have a deep, heartfelt belief in your topic; start strong - engage the audience from the very beginning; keep it short – audiences have a short limit before their minds wander from passive listening; get out from behind the podium - remove physical barriers between you and the audience in order to build rapport; use written documents (research papers, handouts, executive summaries, etc.) only for the expanded details - audiences will be much better served receiving a detailed, written handout as a takeaway from the presentation, rather than a mere copy of your PowerPoint slides (Reynolds, 2008). Froman (1994) highlighted that workplace learning should be designed to provide individuals with the knowledge and skills required to improve performance, and that individual development should also advance the overall mission or goal of the organization.

Effective professional development for mainstream teachers of English language learners (ELLs) must be grounded in the concept that content and language are inextricably linked and that linkage has to be reflected in teachers' instructional practice (Schleppegrell, 2012). It is critical for improved teacher practice and improved student achievement to have a content focus that emphasizes teachers' understanding of and strategies they can use for teaching academic subject knowledge (Penuel, Gallagher & Moorthy, 2011; Lee, Deaktor, Enders & Lambert, 2008).

Good and Bad PD Traits – *Keep in Mind While Planning*

The author of this guide had the opportunity to participate in a district-wide professional development planning conversation with other building and district administrators. The two lists in the table below – one of good PD characteristics and one of bad PD characteristics – were generated from the discussion.

Professional Development Experiences	
<i>Good</i>	<i>Bad</i>
Objectives clearly defined	Presenter had condescending tone
Knowledgeable presenters/ experts	Material that I did not “buy in” to
Presented by teacher experts	Talked <i>to</i> not <i>with</i> participants
Information I could immediately apply/ relevant	Presenter showed bias
Actionable take-aways	Added additional stress/ responsibility
Interactive format/ workshop model	Did not apply to my work
Hands-on	Presenter had poor facilitation skills
Contained new information	Too many activities
Collaboration time	No follow-up/ “one and done”
Allowed discussion	Assumed everyone had the same level of knowledge
Repeated/ follow-up/ extended time	Too large of a group
Organized	Poor use of technology
Presenter has credibility – has been in classroom	Longer/slower than needed
Visited class & provided feedback	PD just for the sake of offering PD/ no substance
Theoretically-based	Outside of comfort zone
Asked thought provoking questions	Company rep/ trying to sell a product/ ulterior agenda
Uses appropriate humor	Not enough time
Asked questions beforehand/ understands audience needs	Too much information
Pertained to job/ responsibilities	
Modeled strategies	
Encouraged to try new strategy/ permission to “fail”	

Hook

Much like when teachers plan lessons, presenters should plan on a hook to engage and capture participants' attention from the very beginning. In the case of illustrating cultural relevancy, one way to help participants consider multiple perspectives and provoke thought is to begin the workshop by sharing the following anecdote,

Philosophical differences in education have a long history.

An instructive one, described by Benjamin Franklin, arose in 1744 between British colonists and the Six Nations, a confederation of Iroquois tribes. Treaty negotiators for the colony of Virginia, looking for peaceful ways to assimilate the Indians, proposed to provide free tuition for several of their youths at the college of William and Mary. The offer was politely declined. According to Franklin, a Six Nations elder explained their rationale as follows:

[Y]ou who are wise must know that different nations have different conceptions of things, and you will therefore not take it amiss if our ideas of this kind of education happen not to be the same with yours. We have had some experience of it. Several of our young people were formerly brought up at the colleges of the northern provinces, they were instructed in all your sciences, but when they came back to us they were bad runners, ignorant of every means of living in the woods, unable to bear either cold or hunger, knew neither how to build a cabin, take a deer, or kill an enemy, spoke our language imperfectly, were, therefore, neither fit

hunters, warriors, or counselors; they were totally good for nothing.

We are not, however, the less obliged by your kind offer, though we decline accepting it, and to show our grateful sense of it, if the gentlemen of Virginia send us a dozen of their sons we will take great care of their education, instruct them of all we know, and make Men of them. (Reyes & Crawford, 2010, Kindle loc. 542)

After sharing the hook (the above or another that serves the purpose), give participants a few minutes to reflect on it and make notes of their thoughts. Now that participants have gotten some perspective and were able to process their thoughts, the presenter is more likely to maintain their attention for the rest of the workshop if all other elements are present.

Background (terminology, demographics, theory/language acquisition stages)

While participants' levels of experience and understanding of sheltered instruction and culturally relevant strategies will vary, it is beneficial to level-set early on in the presentation. Background information should include a brief overview of language acquisition theory and demographics specific to the target population. Recommended inclusions are working definitions of any terminology that will be used throughout the workshop, the stages of language acquisition, and what acculturation is and can look like.

Examples:

Terminology

English language learners (ELLs) refers to students who are not yet proficient in English and who require instructional support in order to fully access academic content in their classes

Culturally and linguistically diverse students (CLD) an inclusive term for students that are not members of the dominant culture. This includes English language learners from all backgrounds as well as African American, Hispanic, and Native American students

Mainstream teachers are teachers who do not specialize in teaching students who are not yet fully proficient in English, and from whom many ELLs receive all or most of their instruction

English as a second language (ESL) is direct English instruction focused on acquisition of English

Bilingual education instruction is in the student's home language (L1) and the target language (Dual language programs are bilingual education)

Basic Interpersonal communication skills (BICS)- casual, common vernacular, what you might observe on the playground or during lunch

Cognitive academic language proficiency (CALP)- the language required to fully access the curriculum, tends to be low frequency language (Ex: quotient, indigo, gargantuan); commonly assessed by high stakes tests

Home language (L1)- Language spoken by or to students at home/outside of school

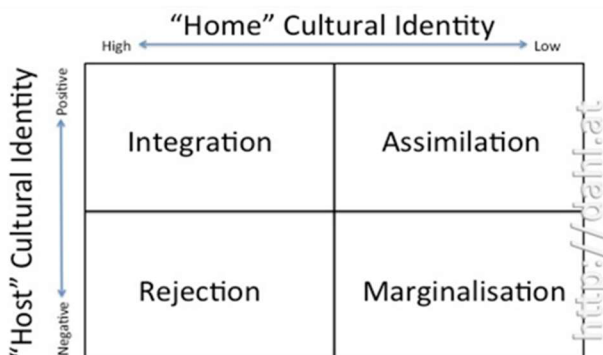
Language Acquisition Stages

Figure 2.1
Stages of Second Language Acquisition

Stage	Characteristics	Approximate Time Frame	Teacher Prompts
<i>Preproduction</i>	The student <ul style="list-style-type: none"> Has minimal comprehension Does not verbalize Nods "Yes" and "No" Draws and points 	0–6 months	<ul style="list-style-type: none"> Show me . . . Circle the . . . Where is . . . ? Who has . . . ?
<i>Early Production</i>	The student <ul style="list-style-type: none"> Has limited comprehension Produces one- or two-word responses Participates using key words and familiar phrases Uses present-tense verbs 	6 months–1 year	<ul style="list-style-type: none"> Yes/no questions Either/or questions One- or two-word answers Lists Labels
<i>Speech Emergence</i>	The student <ul style="list-style-type: none"> Has good comprehension Can produce simple sentences Makes grammar and pronunciation errors Frequently misunderstands jokes 	1–3 years	<ul style="list-style-type: none"> Why . . . ? How . . . ? Explain . . . Phrase or short-sentence answers
<i>Intermediate Fluency</i>	The student <ul style="list-style-type: none"> Has excellent comprehension Makes few grammatical errors 	3–5 years	<ul style="list-style-type: none"> What would happen if . . . ? Why do you think . . . ?
<i>Advanced Fluency</i>	The student has a near-native level of speech.	5–7 years	<ul style="list-style-type: none"> Decide if . . . Retell . . .

Source: Adapted from Krashen and Terrell (1983).

Acculturation Matrix



Based on Berry (1980)

Research-based Teaching Strategies (grade and subject specific)

For a half-day session (3 hours), it is recommended that two SIOP components and strategies specific to the grade level with a listing and cross analysis of five culturally inclusive classroom components. For a full day session (6 hours), four SIOP components should be introduced with up to 10 culturally inclusive classroom components that overlap and corresponding strategies for the target grade level(s) and subject(s). As there are eight SIOP components, at least 12 hours over time/sessions would be necessary to introduce participants to the components and strategies, and to allow for time to practice and discuss. Grade level-specific strategies and SIOP lesson plans can be found on www.colorincolorado.org and www.cal.org/siop/lesson-plans. The presenter should choose appropriate strategies and sample lesson plans for the specific grade and content areas taught by the workshop participants.

There should be time between sessions of no more than a day (6 hours) for participants to implement what they have learned. It is easier to implement a few new changes and do it well and keep building on that than to overwhelm participants with too much information at once. Overwhelming can lead to a lack of application, and the ultimate goal of PD is to enhance practice, for which application of the learned information is key.

Praise and Specific Areas in Need of Improvement

Participant buy-in is more likely when people do not feel defeated, talked down to, or as if they are receiving PD because their work is wrong or not valuable. It is important to highlight what participants do well as a whole while also pointing out areas of improvement. This is not only good for morale, but also for efficiency as areas of need should receive the most effort and attention. There is no need to treat adult learners differently than children for which we know feedback should be helpful, and constructive but not demoralizing. One way to offer feedback is to use aggregate observation data in the same format as the instrument used to observe and highlight in green what is done well consistently, in orange or yellow, what is inconsistent or not apparent across that grade level or subject matter staff's practice, and in red what needs the most attention.

Example:

Lesson Preparation

1. Content objectives clearly defined, displayed, and reviewed with students
2. Language objectives clearly defined, displayed, and reviewed with students
3. Content concepts appropriate for age and educational background level of students
4. Supplementary materials used to a high degree, making the lesson clear and meaningful (e.g., computer programs, graphs, models, visuals)
5. Adaptation of content (e.g., text, assignment) to all levels of student proficiency
6. Meaningful activities that integrate lesson concepts (e.g., surveys, letter writing, simulations, constructing models) with language practice opportunities for reading, writing, listening, and/or speaking

Building Background

7. Concepts explicitly linked to students' background experiences
8. Links explicitly made between past learning and new concepts
9. Key vocabulary emphasized (e.g., introduced, written, repeated, and highlighted for students to see)

Opportunities to Gain Perspective

Our personal ideologies can influence the work we do. Sometimes depending on people's backgrounds and experiences, we develop ideas are based on personal opinion rather than fact or research. This can be the case in regard to how we perceive language learning and assimilation versus acculturation. It is also possible to take the complexity of the English language for granted when one is a native speaker. Thus, it is recommended that for PD regarding meeting the needs of culturally and linguistically diverse (CLD) students, the presenter include opportunities for participants to gain perspective.

For example, to illustrate the difference between basic interpersonal communication skills (BICS) and cognitive academic language proficiency (CALP), an activity can be facilitated to put participants in the shoes of someone from a non-dominant culture. Participants can imagine they are going to a foreign country and don't speak the language with the following prompt:

You have just won a FREE- all expenses paid- trip to (insert foreign country here). When you arrive at the airport and during your visit, hardly anyone will speak English (or any other language you speak ☺). Use sticky notes to write a few things that you will try to learn how to say/ask in (insert language here) in order to be prepared for your trip.

Post the notes written by participants where they can be seen by everyone in the room, or have people walk around and take a look at the notes if space allows. It will likely be apparent that people will want to know basic survival and conversational language (asking for a bathroom, food, or maybe directions). It is unlikely that anyone will be asking for opinions, asking how to persuade someone to do something, or other cognitively demanding language needs. This activity can lead into why students who can communicate with friends on the playground or in the cafeteria can have academic difficulty. Video clips are also helpful in providing varied

formats to the presentation and building perspective. A particular clip from the television show “I love Lucy” illustrates one of the most difficult sounds in the English language: “ough” (find it at <https://www.youtube.com/watch?v=MAL9VD6Lz9Y>). These experiences – an activity or relevant video - can have a more lasting impact than presenter oral explanations.

Opportunities for Discussion/Questions

Throughout any thought-provoking presentation, participants will have questions or comments. While it can interrupt the flow of information to let people just talk at any point, it is also important to have opportunities to clarify anything people are wondering about and for discussions among colleagues to unpack what can be dense information. It is a fine balance as groups may have people who really enjoy talking and can take over a discussion, but having planned opportunities for discussion and questions with clear expectations about when the group has to get back on track can lend structure to discussions. In order to also help people feel comfortable and confident to share questions or ideas, the presenter should offer an ongoing line of communication or access to themselves or another professional that can help participants even when the workshop is over.

Opportunity to Plan/Apply Strategies

As educators, we know the effective components of a lesson. Adult learners need similar structure and guided practice to be successful at mastering something new or something that they need to improve. Thus, guided ideas such as scenarios in which workshop participants have to plan for a class with several practice learner profiles and strategies that they can choose to incorporate with lesson content that they are familiar with and have presented before is an essential part of moving from theory to practice.

Example:

Give participants the following scenario and have them look over the strategies presented and discussed to decide which ones would be applicable.

Susana is an ELL. She is in (insert grade) and has a LAS Links score of 3 overall, 2 in reading, 2 in writing, 4 in speaking, and 3 in listening. She has to write a persuasive essay and so far all she has done is read the writing prompt. She is struggling and complaining that she doesn't know where to begin and that she is not sure which issue in the prompt she feels stronger about. What can you do to help Susana?

Opportunities for Collaboration

During and after the workshop(s), participants should be able to work in grade level and/or content area teams to plan appropriate lessons and incorporate elements of culturally responsive classrooms. This way they can help each other fill in knowledge gaps and discuss what has worked or what they need assistance with addressing in their classrooms. If time is being provided for these discussions, asking them to keep meeting minutes or notes can help keep participants on task and produce a resource that will also be helpful for their own use.

Detailed Hand-outs/Resources for Reference, Ideas, and Examples

Resources to be used beyond the date(s) of the workshop(s) can be digital, but must be very accessible and organized such as folders in a shared drive, or a web-based resource created for the district or school specifically. Relevant hand-outs should be differentiated by grade level and/or subject matter. Examples of how to apply the strategies selected to be part of the workshop should be provided. However, these should not be given all at once at the beginning of the presentation. Rather, it is wise to provide them as each point is discussed. It can be distracting or overwhelming to receive too much information at once, and many of us when we have something in front of us to read, will read it rather than listen to the presenter.

Point Persons for Follow-up/Resources

In order to help workshop participants feel comfortable and confident to share questions or ideas, the presenter should offer an ongoing line of communication in the form of access to themselves or another professional that can help participants even after the workshop(s) is/are over. Also, time and hand-outs/resources are finite. Since there is no way to present everything there is to know about English acquisition, sheltered instruction, or culturally responsive pedagogy in even a series of workshops, participants should know where they can search for more information on their own if they are interested in going beyond the scope of the PD material covered. Additional user-friendly resources for all grade levels can be found at www.colrincolorado.org and <http://www.cal.org/siop/lesson-plans/>.

Homework/Specific Expectations that Knowledge will be Applied

When people leave with “homework” or something that they are expected to complete, they have now taken the first step of applying what was learned in PD. Further, since participants should have time to work in their grade-level or subject teams, they should leave with a detailed, but simple assignment they can complete on their own or at their next team meeting. Once people have invested time into doing the legwork such as creating a new lesson plan or developing a new classroom activity, they are likely to go to the next step of applying that plan or activity in the classroom.

Example:

Using the Sheltered Instruction and Culturally Responsive Classrooms Guide, choose one guideline/feature to focus on for your present or next content unit/lesson. Use the supplemental handouts (i.e.: RESC cards, strategies) to find at least one strategy that helps support that guideline/feature. Fill in the template to add activities using strategies that will assist your ELL and CLD students access the content in your classroom.

Class:	
Lesson content/topic	
Guideline/feature	

Lesson [use at least one ELL/CLD strategy to support any part(s) of your lesson]	
Introduction	
Procedure	
Practice	
Evidence of Learning	

Materials Needed	

Measures for Presenters/Administrators

Simple checklists can be created in a digital format, such as an Excel sheet, that can tally automatically and provide us with important data. See below for a sample observation sheet for four SIOP components and culturally responsive elements. The other four SIOP components can be listed and measured the exact same way. If you are trying to gather data on a large group of people, the presenter does not have to conduct observations themselves, anyone who is familiar with the components and with conducting observations would be able to collect the data.

Ideally, if multiple observers are collecting data before and after the PD interventions, they should have some time to calibrate and ensure that everyone is looking for the same thing.

Example: (See next page)

Observation Protocol

(Adapted from Echevarria, Vogt, & Short 2008; with elements from Schleppegrell & O'Hallaron 2011; Lucas & Villegas 2010; and Cartledge & Kourea 2008)

Observer: _____ Class: _____

Date: _____ Topic: _____

Time: _____ Grades: _____

Rate each component on a scale of 4 through 0 or NA if not applicable, as observed in the lesson

4= Highly Evident -----0= Not Evident

Lesson Preparation

Rating: 4 3 2 1 0 NA

1. Content objectives clearly defined, displayed, and reviewed with students _____
2. Language objectives clearly defined, displayed, and reviewed with students _____
3. Content concepts appropriate for age and educational background level of students _____
4. Supplementary materials used to a high degree, making the lesson clear and meaningful (e.g., computer programs, graphs, models, visuals) _____
5. Adaptation of content (e.g., text, assignment) to all levels of student proficiency _____
6. Meaningful activities that integrate lesson concepts (e.g., surveys, letter writing, simulations, constructing models) with language practice opportunities for reading, writing, listening, and/or speaking _____

Building Background

Rating: 4 3 2 1 0 NA

7. Concepts explicitly linked to students' background experiences _____
8. Links explicitly made between past learning and new concepts _____
9. Key vocabulary emphasized (e.g., introduced, written, repeated, and highlighted for students to see) _____

Comprehensible Input

Rating: 4 3 2 1 0 NA

10. Speech appropriate for students' proficiency level (e.g., slower rate, enunciation, and simple sentence structure for beginners) _____
11. Clear explanation of academic tasks _____
12. A variety of techniques used to make content concepts clear (e.g., modeling, visuals, hands-on activities, demonstrations, gestures, body language) _____

Interaction

Rating: 4 3 2 1 0 NA

13. Frequent opportunities for interaction and discussion between teacher/student and among students, which encourage elaborated responses about lesson concepts _____
14. Grouping configurations support language and content objectives of the lesson _____
15. Sufficient wait time for student responses consistently provided _____
16. Ample opportunities for students to clarify key concepts in L1 as needed with aide, peer, or L1 text _____

Culturally and Linguistically Responsive Classroom Elements

Rating: 4 3 2 1 0 NA

17. There is evidence that content is organized thematically _____
18. Academic language is explicitly being taught _____
19. High expectations are apparent _____
20. An atmosphere of trust and risk-taking has been established _____
21. Instruction is scaffolded to promote CLD student learning _____
22. Classrooms has high levels of pupil academic responding _____
23. Teacher is monitoring and providing feedback throughout lesson _____
24. Classroom is disciplined and fair _____
25. Proactive systems are in place _____
26. Social skills instruction is intertwined with content/lesson delivery _____
27. Student comprehension and learning of objectives are assessed _____

Total Points Earned (120 possible): _____

Percentage Score: _____

Comments:

Evaluate and Plan Future PD

It is important to know if the PD was helpful and effective in impacting practice. Depending on time and resources available, this can be done via surveys, focus groups, and/or observation data. If there are specific areas that seem to have been impacted by PD it is a good idea to share with participants that their efforts are noticed and appreciated. If there are still areas that need improvement, that can be addressed in future PD sessions. Professional development on any topic is not a silver bullet, but ongoing planning, discussion, and implementation with the goal of building capacity and improving practice for the benefit of our students.

References

- Froman, L. (1994). Adult learning in the workplace. In J. Sinnott (Ed.), *Interdisciplinary handbook of adult lifespan learning* (pp. 158-170). London, UK: Greenwood.
- Lee, O., Deaktor, R., Enders, C., & Lambert, J. (2008). Impact of a multi-year professional development intervention on science achievement of culturally and linguistically diverse elementary students. *Journal of Research in Science Teaching*, 45(6), 726-747.
- Penuel, W. R., Gallagher, L. P., & Moorthy, S. (2011). Preparing teachers to design sequences of instruction in earth science: A comparison of three professional development programs. *American Educational Research Journal*, 48(4), 996-1025.
- Reyes, S. A., and Crawford, J. (2012). "Diary of a Bilingual School: *How a Constructivist Curriculum, a Multicultural Perspective, and a Commitment to Dual Immersion Education Combined to Foster Fluent Bilingualism in Spanish- and English- Speaking Children*". DiversityLearningK12: Portland, OR. (Kindle Ed.).
- Reynolds, G. (2008). Presentation Zen: Simple Ideas on Presentation Design and Delivery. Berkeley, CA: New Riders Press.
- Schlepppegrell, M. (2012). Academic language in teaching and learning: Introduction to the special issue. *The Elementary School Journal*, 112(3), 409-418.

“Look Fors” for Culturally and Linguistically Responsive Classrooms

Look for **students** who are:

- *Practicing the 4 language skills:* speaking, reading, writing, listening
- *Collaborating* with peers in heterogeneous configurations
- *Participating* in all aspects of the lesson
- *Following* directions and demonstrating understanding
- *Working through challenges* *Engaged in* learning
- *Comfortable* and included

Rather than:

- *Doing quiet work* only
- *Working alone* or only in homogenous racial/cultural or ability groups
- *Dazed/confused*
- *“Checked out”* from classroom/lesson
- *Completing* worksheets
- *Memorizing* vocabulary out of context
- *Frustrated* with content that is incomprehensible

Look for **teachers** who are/have:

- *Organizing* content thematically
- *Content AND language objectives*
- *Explicitly teaching* academic language
- *High expectations* for all students
- *Using* knowledge of ethnically diverse cultures, families & communities to guide instruction
- *Active and animated* – using body language and gestures to communicate meaning
- *Conscious* of their rate of speech and enunciation
- *Using* multiple modalities (visuals, manipulatives, etc.)
- *Scaffolding instruction*
- *Modeling* appropriate language use
- *Sociolinguistic consciousness*
- *Creating* an atmosphere of trust and risk-taking
- *Fair and proactive* systems in place

Rather than:

- *Lacking* purpose
- *Expecting* students to know content area-specific, low-frequency vocab
- *Allowing* some students to be disengaged
- *Using only* dominant culture examples and experiences
- *Relying on* shallow depth of knowledge activities
- *Appearing* bored/ disinterested
- *Speaking* too fast
- *Lecturing*
- *Focusing* on rigor with no support
- *Correcting* students on pronunciation and grammar
- *Demanding* use of “proper” English
- *Reacting* to behavior and classroom issues arbitrarily or not at all